


STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL						1. WELL NAME and NUMBER Ute Tribal 30-05					
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT ANTELOPE CREEK					
4. TYPE OF WELL Oil Well <input type="checkbox"/> Coalbed Methane Well: NO <input type="checkbox"/>						5. UNIT or COMMUNITIZATION AGREEMENT NAME ANTELOPE CREEK					
6. NAME OF OPERATOR PETROGLYPH OPERATING CO						7. OPERATOR PHONE 208 685-7674					
8. ADDRESS OF OPERATOR 960 Broadway Ave, Ste 500, Bosie, ID, 83703						9. OPERATOR E-MAIL bwest@pgei.com					
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) 14-20-H62-3519			11. MINERAL OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input type="checkbox"/> INDIAN <input checked="" type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>					
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')					
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')					
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN') Ute Indian Tribe			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>					
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN			
LOCATION AT SURFACE		2042 FNL 353 FWL		SWNW	30	5.0 S	3.0 W	U			
Top of Uppermost Producing Zone		1990 FNL 580 FWL		SWNW	30	5.0 S	3.0 W	U			
At Total Depth		1990 FNL 580 FWL		SWNW	30	5.0 S	3.0 W	U			
21. COUNTY DUCHESENE			22. DISTANCE TO NEAREST LEASE LINE (Feet) 353			23. NUMBER OF ACRES IN DRILLING UNIT 640					
			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 1267			26. PROPOSED DEPTH MD: 5719 TVD: 5714					
27. ELEVATION - GROUND LEVEL 6161			28. BOND NUMBER 4556			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 43-8342					
Hole, Casing, and Cement Information											
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight	
Cond	18	14	0 - 40	5.0	Unknown	10.0	Class G	25	1.17	15.8	
Surf	12.25	8.625	0 - 480	24.0	J-55 ST&C	10.0	Class G	221	1.17	15.8	
Prod	7.875	8.625	0 - 5719	15.5	J-55 LT&C	10.0	Class G	472	1.91	12.5	
							Class G	265	1.46	13.4	
ATTACHMENTS											
VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES											
<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER					<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN						
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)					<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER						
<input checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP						
NAME Ed Trotter			TITLE Agent			PHONE 435 789-4120					
SIGNATURE			DATE 08/30/2011			EMAIL edtrotter@easilink.com					
API NUMBER ASSIGNED 43013509350000			APPROVAL  Permit Manager								

RECEIVED: September 08, 2011

CONFIDENTIAL
NINE POINT PLAN

UTE TRIBAL 30-05
SW/NW, SEC. 30, T5S, R3W
DUCHESNE COUNTY, UTAH

1. ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:

FORMATIONS	DEPTH	SUBSEA
Qal	Surface	Surface
Uinta	30	6131
Green River	1061	5100
Trona	2297	3865
Mahogany Shale	2457	3705
"B" Marker	3520	2643
"X" Marker	4006	2158
Douglas Creek	4151	2013
"B" Limestone	4522	1642
B/Castle Peak Limestone	5082	1083
BSCARB	5511	654
Total Depth	5719	
Anticipated Maximum BHP	1800	

2. ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS FORMATIONS:

<u>Substance</u>	<u>Formation</u>	<u>Depth</u>	<u>Subsea</u>
Oil/Gas	Douglas Creek	4151	2013
Oil/Gas	B/Castle Peak	5082	1083
Base of moderately saline ground water	Uinta	61	6100

3. PRESSURE CONTROL EQUIPMENT: See attached 2000 psi BOP Schematic Diagram.

BOPE TESTING PROCEDURE:

1. The BOPE will be tested by a professional tester to conform to Onshore Order #2.
2. The flow line will have a minimum diameter of 10".

4. CASING PROGRAM:

Hole	Casing	Top – MD	Bottom – MD	Weight lb/ft	Grade	Thread
18"	14"	sfc	40'	steel	cond	none
12 1/4"	8 5/8"	sfc	480'	24.0	J-55	STC
7 7/8"	5 1/2"	sfc	5719'	15.5	J-55	LTC

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NINE POINT PLAN

UTE TRIBAL 30-05
SW/NW, SEC. 30, T5S, R3W
DUCHESNE COUNTY, UTAH

Casing Strengths:				Collapse	Burst	Tensile
8 5/8"	24.0 lb.	J-55	STC	1,370 psi	2,950 psi	263,000 lb
5 1/2"	15.5 lb.	J-55	LTC	4,040 psi	4,810 psi	239,000 lb

All casing will be new or inspected.

5. MUD PROGRAM

INTERVAL

0' - 480'

480' - 5719'

MUD TYPE

Air/Aerated Water

Water with DAP or DAP alternative

Gel/polyacrylamide polymer w/5-10% LCM, LSND as conditions warrant

Sufficient mud/kill medium inventory will be maintained on location in either tanks or the reserve pit during drilling of the surface and production holes to handle any adverse conditions that may arise. A mud weight of 9.5# to 10.5# will be maintained during drilling of the production hole.

The rat and mouse holes will be drilled with the Air Rig after the surface casing is set. Rig mounted and skid mounted air compressors capable of producing 2200 CFM at 350 psi will be used.

6. CEMENT PROGRAM:

20" Conductor:

Cement to surface with construction cement.

8 5/8" Casing: sfc - 480'

Lead/Tail Slurry: 0' - 480': 221 sks (258 cu ft) Class G cement + 0.25 lbs/sk

Cello Flake + 2% CaCl₂. Slurry wt: 15.8 ppg, Slurry yield: 1.17 ft³/sk,

Slurry volume: 12-1/4" hole + 30% excess. (Cement will be circulated to surface).

5 1/2" Casing: sfc - 5719'

Lead Slurry: sfc - 4000': 472 sks (901 cu ft) EXPANDACEM System (Class "G" + additives) + 1 lb/sx Granulite TR 1/4 (Lost Circulation Material) (12.5 PPG±, 1.91 ft³/sk) hole + 30% excess.

Tail Slurry:

4000' - 5719': 265 sx (387 cu ft) EXPANDACEM System (Class "G" + additives) + 1 lb/sx Granulite TR 1/4 (Lost Circulation Material) (13.4 ppg±, 1.46 ft³/sk) hole + 30% excess. Cement will be circulated to surface with top job as needed.

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UTE TRIBAL 30-05
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DUCHESNE COUNTY, UTAH

7. VARIANCE REQUESTS:

1. Operator requests a variance to regulations requiring the blooie line discharge be 100' from the well bore. Due to reduced location size, the blooie line discharge will be approximately 75' from the well bore and securely anchored.
2. Operator requests a variance to regulations requiring a straight run blooie line. Due to the location of the flare pit the blooie line will have two targeted "Ts".
3. Operator requests a variance to regulations requiring Deduster Equipment on the blooie line. A mister will be used at the end of the blooie line when drilling with air only.
4. Operator requests a variance to regulations requiring an automatic igniter or continuous pilot light on the blooie line. An air/air-mist drilling system will be used.
5. Operator requests a variance to regulations requiring the compressors be located in the opposite direction from the blooie line a minimum of 100 feet from the well bore. Due to reduced location size the compressors will be located as close as is reasonable to the opposite direction from the blooie line and 75' from the well bore.
6. Operator requests a variance to regulations requiring a BOPE on the hole when drilling the surface hole. An air bowl will be utilized on the diverter system in place of a BOPE.

8. EVALUATION PROGRAM:

Logs: Platform Express TD to base of surface casing (DLL, MSFL, CNG, CDL, GR)

Cores: None anticipated

DST: None Programmed

Completion: To be submitted at a later date.

9. ABNORMAL CONDITIONS:

None anticipated. Based on operators past drilling experience in the area the encounter of any over pressured formations or H₂S are not anticipated.

10 OPERATIONS:

All engine exhausts within 100 feet of the well bore will be equipped with spark arrestors.

All cuttings and circulating medium shall be directed into the reserve or booie pit.

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UTE TRIBAL 30-05
SW/NW, SEC. 30, T5S, R3W
DUCHESNE COUNTY, UTAH

A float valve will be run above the bit with sufficient rating to prevent flow back.

An air/mist and fluid/mud drilling system will be used.

All casing will be new or inspected.

Based on operators past drilling experience in the area the encounter of any over pressured formations or H₂S are not anticipated.

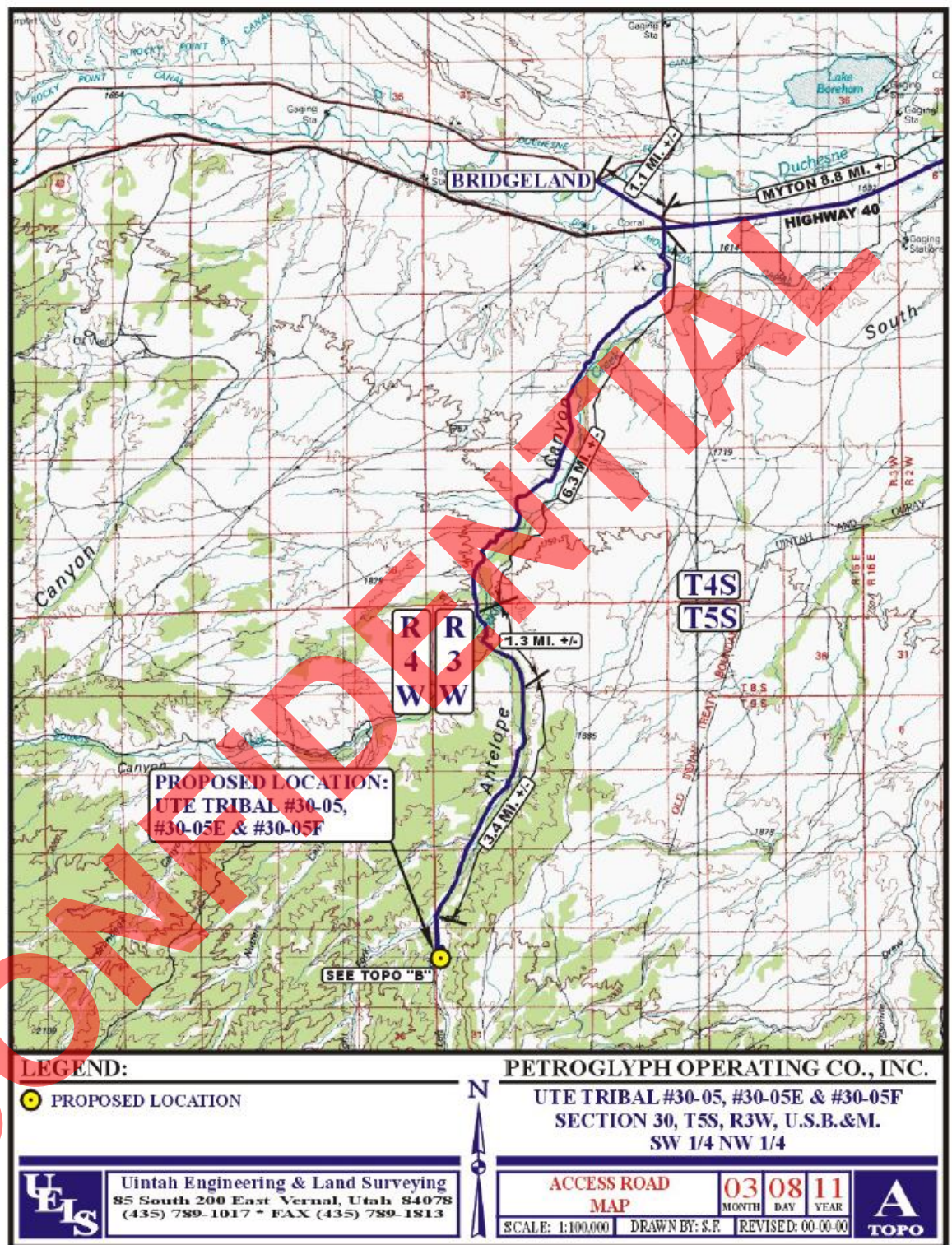
11. STANDARD REQUIRED EQUIPMENT:

None Required

12. HAZARDOUS CHEMICALS:

No chemicals subject to reporting under SARA title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling of this well.

(Attachment: BOP Schematic Diagram)



Petroglyph Operating Co. Inc.

Duchesne County, UT NAD83

UTE Tribal 30-05

UT 30-05

Wellbore #1

Plan: Plan #1

Standard Planning Report

09 May, 2011

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Scientific Drilling International, Inc.

Planning Report

Database:	Rockies Compass Server	Local Co-ordinate Reference:	Well UT 30-05
Company:	Petroglyph Operating Co. Inc.	TVD Reference:	WELL @ 6164.00ft (Original Well Elev)
Project:	Duchesne County, UT NAD83	MD Reference:	WELL @ 6164.00ft (Original Well Elev)
Site:	UTE Tribal 30-05	North Reference:	True
Well:	UT 30-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Project	Duchesne County, UT NAD83		
Map System:	US State Plane 1983	System Datum:	Mean Sea Level
Geo Datum:	North American Datum 1983		
Map Zone:	Utah Central Zone		

Site	UTE Tribal 30-05		
Site Position:		Northing:	7,178,085.54 usft
From:	Lat/Long	Easting:	1,983,827.95 usft
Position Uncertainty:	0.00 ft	Slot Radius:	13.200 in
		Latitude:	40° 1' 9.260 N
		Longitude:	110° 16' 25.480 W
		Grid Convergence:	0.79 °

Well	UT 30-05, 2042 FNL & 353 FWL		
Well Position	+N/-S	0.00 ft	Northing: 7,178,085.54 usft
	+E/-W	0.00 ft	Easting: 1,983,827.95 usft
Position Uncertainty	0.00 ft	Wellhead Elevation:	Latitude: 40° 1' 9.260 N
			Longitude: 110° 16' 25.480 W
			Ground Level: 0.00 ft

Wellbore	Wellbore #1		
Magnetics	Model Name	Sample Date	Declination (°)
	IGRF2010	4/7/2011	11.42
			Dip Angle (°) 65.74
			Field Strength (nT) 52,240

Design	Plan #1		
Audit Notes:			
Version:	Phase:	PLAN	Tie On Depth: 0.00
Vertical Section:	Depth From (TVD) (ft)	+N/-S (ft)	Direction (°)
	0.00	0.00	77.00

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	
709.73	2.62	77.00	709.65	1.08	4.67	1.25	1.25	0.00	77.00	
5,719.32	2.62	77.00	5,714.00	52.62	227.94	0.00	0.00	0.00	0.00	UT 30-05 Target

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Project:	Duchesne County, UT NAD83	MD Reference:	WELL @ 6164.00ft (Original Well Elev)
Site:	UTE Tribal 30-05	North Reference:	True
Well:	UT 30-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00	1.25	77.00	599.99	0.25	1.06	1.09	1.25	1.25	0.00
700.00	2.50	77.00	699.94	0.98	4.25	4.36	1.25	1.25	0.00
709.73	2.62	77.00	709.65	1.08	4.67	4.80	1.25	1.25	0.00
800.00	2.62	77.00	799.83	2.01	8.70	8.93	0.00	0.00	0.00
900.00	2.62	77.00	899.73	3.04	13.15	13.50	0.00	0.00	0.00
1,000.00	2.62	77.00	999.62	4.07	17.61	18.07	0.00	0.00	0.00
1,100.00	2.62	77.00	1,099.52	5.09	22.07	22.65	0.00	0.00	0.00
1,200.00	2.62	77.00	1,199.41	6.12	26.52	27.22	0.00	0.00	0.00
1,300.00	2.62	77.00	1,299.31	7.15	30.98	31.80	0.00	0.00	0.00
1,400.00	2.62	77.00	1,399.20	8.18	35.44	36.37	0.00	0.00	0.00
1,500.00	2.62	77.00	1,499.10	9.21	39.89	40.94	0.00	0.00	0.00
1,600.00	2.62	77.00	1,599.00	10.24	44.35	45.52	0.00	0.00	0.00
1,700.00	2.62	77.00	1,698.89	11.27	48.81	50.09	0.00	0.00	0.00
1,800.00	2.62	77.00	1,798.79	12.30	53.26	54.67	0.00	0.00	0.00
1,900.00	2.62	77.00	1,898.68	13.33	57.72	59.24	0.00	0.00	0.00
2,000.00	2.62	77.00	1,998.58	14.35	62.18	63.81	0.00	0.00	0.00
2,100.00	2.62	77.00	2,098.47	15.38	66.63	68.39	0.00	0.00	0.00
2,200.00	2.62	77.00	2,198.37	16.41	71.09	72.96	0.00	0.00	0.00
2,300.00	2.62	77.00	2,298.26	17.44	75.55	77.53	0.00	0.00	0.00
2,400.00	2.62	77.00	2,398.16	18.47	80.00	82.11	0.00	0.00	0.00
2,500.00	2.62	77.00	2,498.05	19.50	84.46	86.68	0.00	0.00	0.00
2,600.00	2.62	77.00	2,597.95	20.53	88.92	91.26	0.00	0.00	0.00
2,700.00	2.62	77.00	2,697.84	21.56	93.37	95.83	0.00	0.00	0.00
2,800.00	2.62	77.00	2,797.74	22.58	97.83	100.40	0.00	0.00	0.00
2,900.00	2.62	77.00	2,897.63	23.61	102.29	104.98	0.00	0.00	0.00
3,000.00	2.62	77.00	2,997.53	24.64	106.74	109.55	0.00	0.00	0.00
3,100.00	2.62	77.00	3,097.43	25.67	111.20	114.13	0.00	0.00	0.00
3,200.00	2.62	77.00	3,197.32	26.70	115.66	118.70	0.00	0.00	0.00
3,300.00	2.62	77.00	3,297.22	27.73	120.11	123.27	0.00	0.00	0.00
3,400.00	2.62	77.00	3,397.11	28.76	124.57	127.85	0.00	0.00	0.00
3,500.00	2.62	77.00	3,497.01	29.79	129.03	132.42	0.00	0.00	0.00
3,600.00	2.62	77.00	3,596.90	30.82	133.48	137.00	0.00	0.00	0.00
3,700.00	2.62	77.00	3,696.80	31.84	137.94	141.57	0.00	0.00	0.00
3,800.00	2.62	77.00	3,796.69	32.87	142.40	146.14	0.00	0.00	0.00
3,900.00	2.62	77.00	3,896.59	33.90	146.85	150.72	0.00	0.00	0.00
4,000.00	2.62	77.00	3,996.48	34.93	151.31	155.29	0.00	0.00	0.00
4,100.00	2.62	77.00	4,096.38	35.96	155.77	159.86	0.00	0.00	0.00
4,200.00	2.62	77.00	4,196.27	36.99	160.22	164.44	0.00	0.00	0.00
4,300.00	2.62	77.00	4,296.17	38.02	164.68	169.01	0.00	0.00	0.00
4,400.00	2.62	77.00	4,396.06	39.05	169.14	173.59	0.00	0.00	0.00
4,500.00	2.62	77.00	4,495.96	40.07	173.59	178.16	0.00	0.00	0.00
4,600.00	2.62	77.00	4,595.86	41.10	178.05	182.73	0.00	0.00	0.00
4,700.00	2.62	77.00	4,695.75	42.13	182.51	187.31	0.00	0.00	0.00
4,800.00	2.62	77.00	4,795.65	43.16	186.96	191.88	0.00	0.00	0.00
4,900.00	2.62	77.00	4,895.54	44.19	191.42	196.46	0.00	0.00	0.00
5,000.00	2.62	77.00	4,995.44	45.22	195.88	201.03	0.00	0.00	0.00
5,100.00	2.62	77.00	5,095.33	46.25	200.33	205.60	0.00	0.00	0.00
5,200.00	2.62	77.00	5,195.23	47.28	204.79	210.18	0.00	0.00	0.00

Scientific Drilling International, Inc.

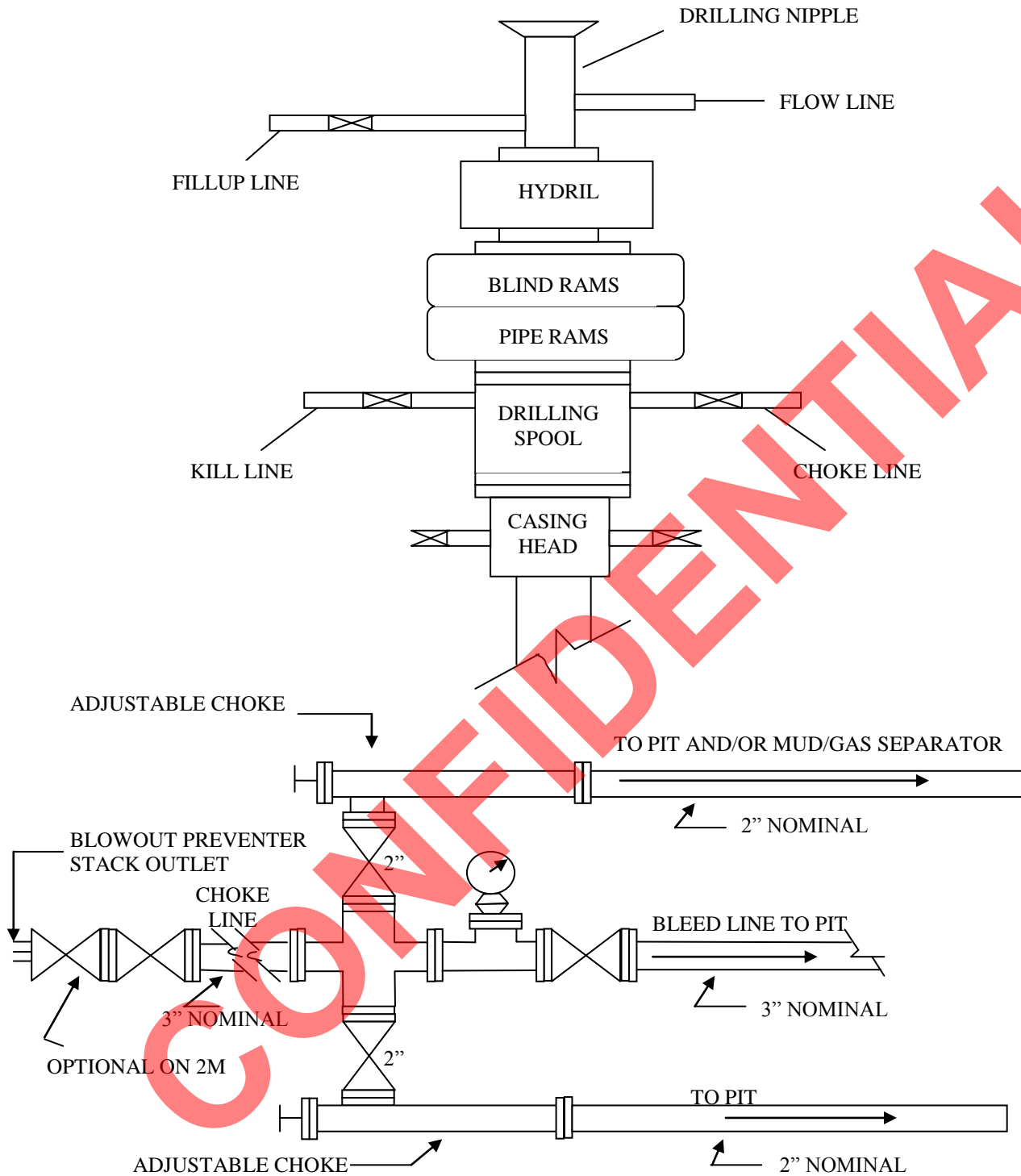
Planning Report

Database:	Rockies Compass Server	Local Co-ordinate Reference:	Well UT 30-05
Company:	Petroglyph Operating Co. Inc.	TVD Reference:	WELL @ 6164.00ft (Original Well Elev)
Project:	Duchesne County, UT NAD83	MD Reference:	WELL @ 6164.00ft (Original Well Elev)
Site:	UTE Tribal 30-05	North Reference:	True
Well:	UT 30-05	Survey Calculation Method:	Minimum Curvature
Wellbore:	Wellbore #1		
Design:	Plan #1		

Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.00	2.62	77.00	5,295.12	48.31	209.25	214.75	0.00	0.00	0.00
5,400.00	2.62	77.00	5,395.02	49.33	213.70	219.33	0.00	0.00	0.00
5,500.00	2.62	77.00	5,494.91	50.36	218.16	223.90	0.00	0.00	0.00
5,600.00	2.62	77.00	5,594.81	51.39	222.62	228.47	0.00	0.00	0.00
5,700.00	2.62	77.00	5,694.70	52.42	227.07	233.05	0.00	0.00	0.00
5,719.32	2.62	77.00	5,714.00	52.62	227.94	233.93	0.00	0.00	0.00

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
UT 30-05 Target - plan hits target center - Point	0.00	0.00	5,714.00	52.62	227.94	7,178,141.28	1,984,055.14	40° 1' 9.780 N	110° 16' 22.550 W

SCHEMATIC DIAGRAM OF 2000 PSI BOP STACK



PETROGLYPH OPERATING CO., INC.
P.O. BOX 607
ROOSEVELT, UTAH 84066

August 5, 2011

Ms. Diana Mason
State of Utah
Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
P.O. Box 145801
Salt Lake City, UT 84114-5801

Re: Directional Drilling R649-3-11

Ute Tribal 30-05: 2042' FNL & 353' FWL, SW/NW (Surface)
1990' FNL & 580' FWL, SW/NW (Bottom Hole)
Sec. 30, T5S, R3W, U.S.B.&M.,
Duchesne County, Utah

Dear Ms. Mason,

Pursuant to the filing of Petroglyph Operating Co., Inc.'s Application for Permit to Drill regarding the above referenced well on August 5, 2011, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of Wells.

- The Ute Tribal 30-05 is located within the Antelope Creek Unit Area.
- Petroglyph Operating Co., Inc. is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and directionally drilling from this location, Petroglyph Operating Co., Inc. will be able to utilize the existing road and pipelines in the area.
- Furthermore, Petroglyph Operating Co., Inc. hereby certifies that it is the sole working interest owner within 460 feet of the entire directional well bore.

Therefore, based on the above stated information, Petroglyph Operating Co., Inc. requests the permit be granted pursuant to R649-3-11.

Respectfully Submitted,

Ed Trotter,
Agent
P.O. Box 1910
Vernal, UT 84078
Phone: (435)789-4120
Fax: (435)789-1420
E-mail: edtrotter@easilink.com

RECEIVED: August 30, 2011

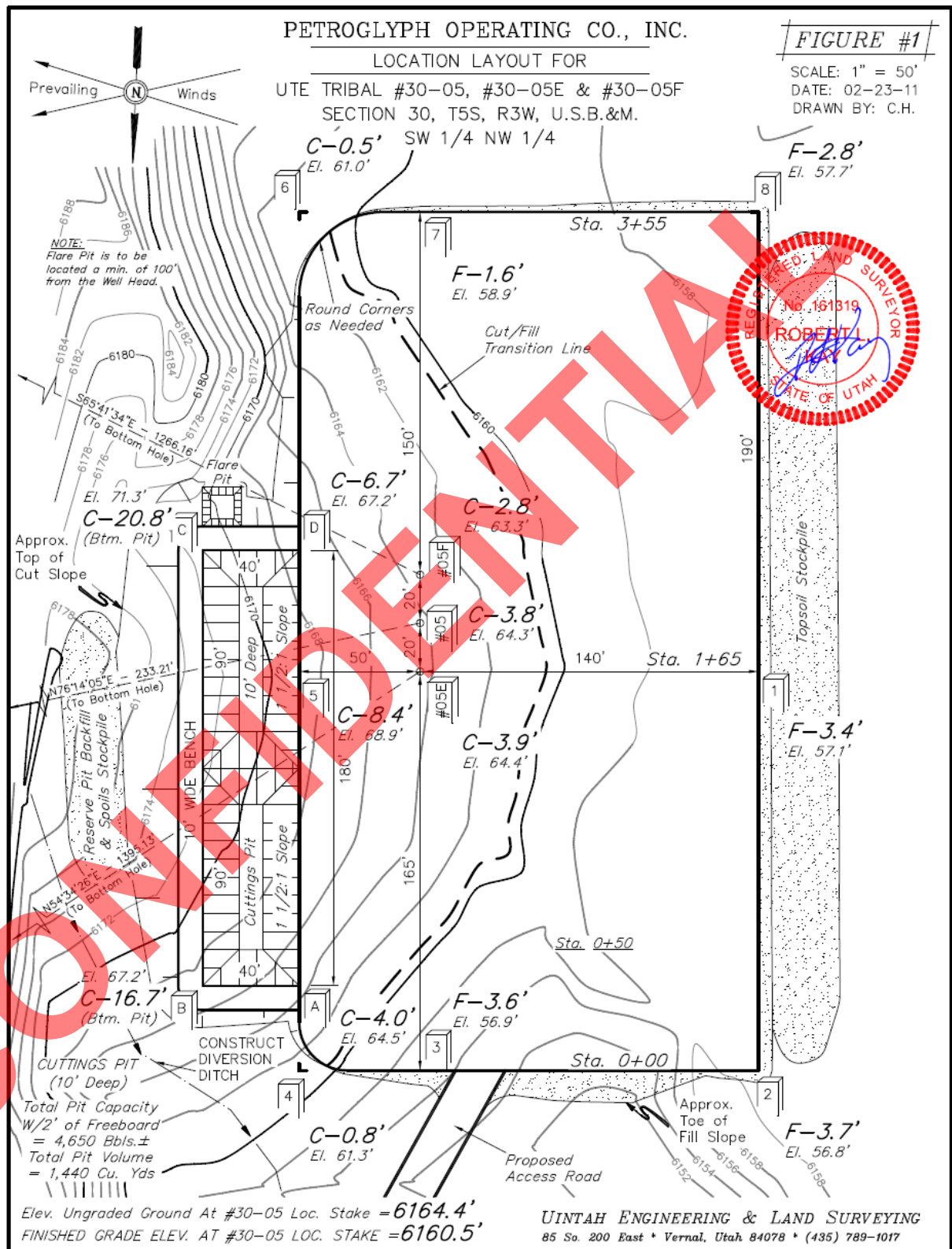
Certification

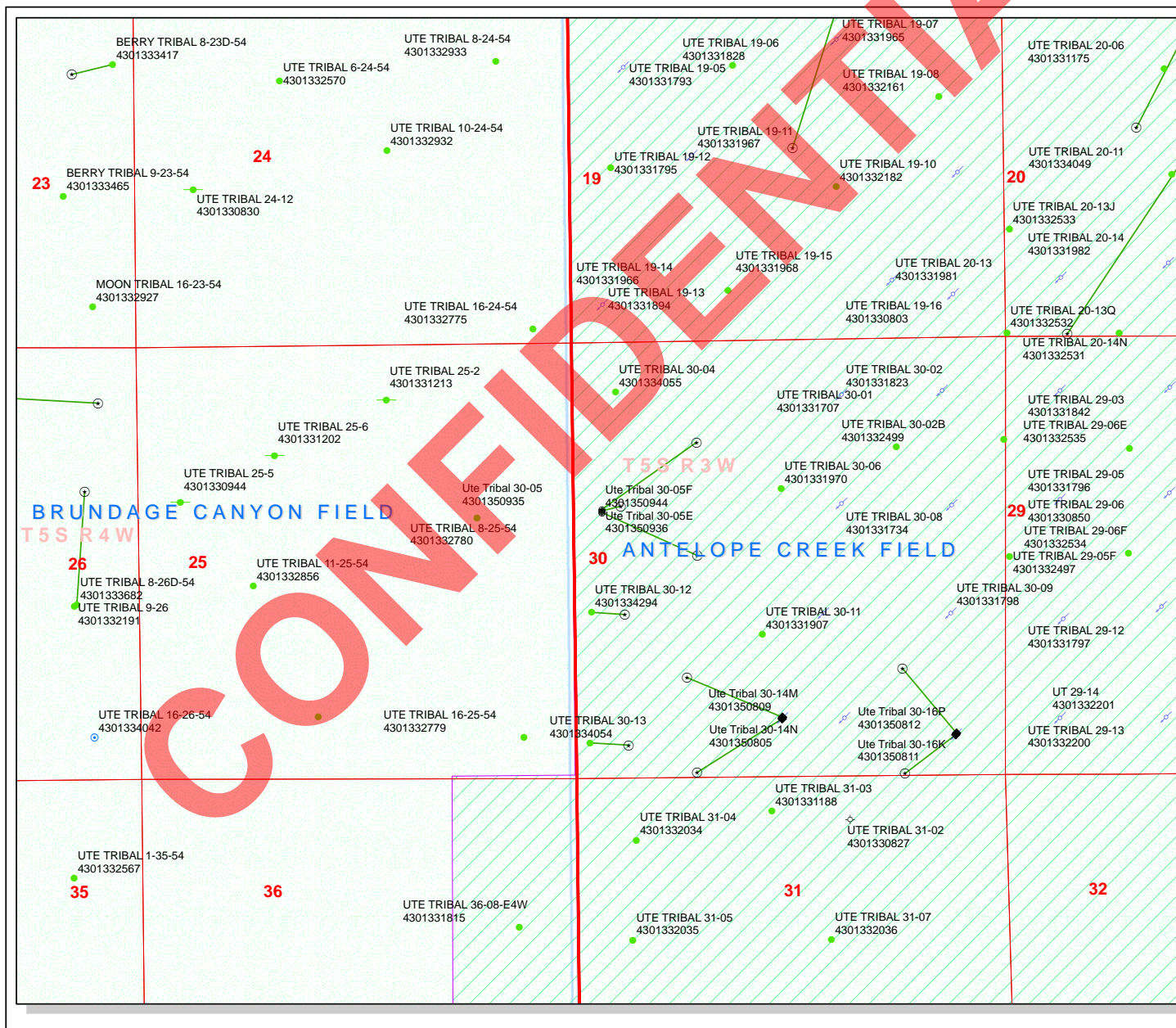
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drillsite and access route; that I am familiar with the conditions that presently exist; that the statements made in the Plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Petroglyph Operating Co., Inc. and its contractors and subcontractors in conformity with this Plan and the terms and conditions under which it is approved.

Please be advised that Petroglyph Operating Co., Inc. is considered to be the operator of the **UTE TRIBAL 30-05 Well, located in the SW/NW of Section 30, T5S, R3W, Duchesne County, Utah; Lease #14-20-H62-3519;** and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond Coverage is provided under Bond #BO 4556.

Date

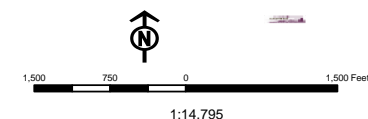
Ed Trotter, as Agent for
Petroglyph Operating Co., Inc.





API Number: 4301350935
Well Name: Ute Tribal 30-05
Township T0.5 . Range R0.3 . Section 30
Meridian: UBM
Operator: PETROGLYPH OPERATING CO
Map Prepared:
Map Produced by Diana Mason

Units	Wells Query Status
ACTIVE	APD - Approved Permit
EXPLORATORY	DRL - Spudded (Drilling Commenced)
GAS STORAGE	GIW - Gas Injection
NF PP OIL	GS - Gas Storage
NF SECONDARY	LA - Location Abandoned
PI OIL	LOC - New Location
PP GAS	OPS - Operation Suspended
PP GEOTHERMAL	PA - Plugged Abandoned
PP OIL	PGW - Producing Gas Well
SECONDARY	POW - Producing Oil Well
TERMINATED	RET - Returned APD
Unknown	SGW - Shut-in Gas Well
ABANDONED	SOW - Shut-in Oil Well
ACTIVE	TA - Temp. Abandoned
COMBINED	TW - Test Well
INACTIVE	WDW - Water Disposal
STORAGE	WIW - Water Injection Well
TERMINATED	WSW - Water Supply Well
Sections	
Township	



WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 8/30/2011**API NO. ASSIGNED:** 43013509350000**WELL NAME:** Ute Tribal 30-05**OPERATOR:** PETROGLYPH OPERATING CO (N3800)**PHONE NUMBER:** 435 789-4120**CONTACT:** Ed Trotter**PROPOSED LOCATION:** SWNW 30 050S 030W**Permit Tech Review:** ☒**SURFACE:** 2042 FNL 0353 FWL**Engineering Review:** ☐**BOTTOM:** 1990 FNL 0580 FWL**Geology Review:** ☒**COUNTY:** DUCHESNE**LATITUDE:** 40.01920**LONGITUDE:** -110.27295**UTM SURF EASTINGS:** 562045.00**NORTHINGS:** 4429932.00**FIELD NAME:** ANTELOPE CREEK**LEASE TYPE:** 2 - Indian**LEASE NUMBER:** 14-20-H62-3519**PROPOSED PRODUCING FORMATION(S):** CASTLE PEAK**SURFACE OWNER:** 2 - Indian**COALBED METHANE:** NO**RECEIVED AND/OR REVIEWED:**

- ☒ **PLAT**
- ☒ **Bond:** INDIAN - 4556
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ☒ **Water Permit:** 43-8342
- ☐ **RDCC Review:**
- ☐ **Fee Surface Agreement**
- ☐ **Intent to Commingle**
- Commingle Approved**

LOCATION AND SITING:

- ☐ **R649-2-3.**
- Unit:** ANTELOPE CREEK
- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ☒ **Drilling Unit**
- Board Cause No:** Cause 214-2
- Effective Date:** 6/9/2000
- Siting:** Suspends General Siting
- ☒ **R649-3-11. Directional Drill**

Comments: Presite Completed**Stipulations:** 4 - Federal Approval - dmason
15 - Directional - dmason**RECEIVED:** September 08, 2011



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

Permit To Drill

Well Name: Ute Tribal 30-05
API Well Number: 43013509350000
Lease Number: 14-20-H62-3519
Surface Owner: INDIAN
Approval Date: 9/8/2011

Issued to:

PETROGLYPH OPERATING CO, 960 Broadway Ave, Ste 500, Bosie, ID 83703

Authority:

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 214-2. The expected producing formation or pool is the CASTLE PEAK Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Notification Requirements:

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at <http://oilgas.ogm.utah.gov>

Reporting Requirements:

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

A handwritten signature in black ink, appearing to read "John Rogers", written over a horizontal line.

For John Rogers
Associate Director, Oil & Gas

RECEIVED

FORM APPROVED
OMB No. 1004-0137
Expires July 31, 2010

UNITED STATES SEP 14 2011
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
14-20-H62-3519
6. If Indian, Allottee or Tribe Name
UTE INDIAN TRIBE

7. If Unit or CA Agreement, Name and No.
14-20-H62-4650
8. Lease Name and Well No.
UTE TRIBAL 30-05

9. API Well No.
43-013-50935

10. Field and Pool, or Exploratory
ANTELOPE CREEK

11. Sec., T., R., M., or Blk. and Survey or Area
**SEC. 30, T5S, R3W,
U.S.B.&M.**

12. County or Parish
DUCHESNE
13. State
UTAH

1a. Type of Work: ☒ DRILL

1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other

☒ Single Zone ☐ Multiple Zone

2. Name of Operator
PETROGLYPH OPERATING CO., INC.

3a. Address **P.O. BOX 1910
VERNAL, UT 84078**

3b. Phone No. (Include area code)
(435)789-4120

4. Location of Well (Report location clearly and in accordance with any State requirements.)*
At surface **2042' FNL, 353' FWL, SW/NW, SEC. 30, T5S, R3W**
Bottom Hole: **1990' FNL, 580' FWL, SW/NW, SEC. 30, T5S, R3W**
At proposed prod. Zone

14. Distance in miles and direction from nearest town or post office*
19.9 MILES SOUTHWEST OF MYTON, UTAH

15. Distance from proposed*
location to nearest
property or lease line, ft. **353'**
(Also to nearest drig. Unit line, if any)

16. No. of Acres in lease
640

17. Spacing Unit dedicated to this well

18. Distance from proposed location*
to nearest well, drilling, completed,
applied for, on this lease, ft. **See Topo
Map "C"**

19. Proposed Depth
**5714' TVD
5719' TMD**

20. BLM/BIA Bond No. on file
BO 4556

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
6160.5 FEET GRADED GROUND

22. Approximate date work will start*
UPON APPROVAL

23. Estimated duration
10 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature

Name (Printed/Typed)
Ed Trotter

Date
August 5, 2011

Title
Agent

Approved by (Signature)

Name (Printed/Typed)

Jerry Kenczka

Date

FEB 13 2012

Title

**Assistant Field Manager
Lands & Mineral Resources**

Office

VERNAL FIELD OFFICE

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of Approval, if any, are attached.

CONDITIONS OF APPROVAL ATTACHED

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*(Continued on page 2)

RECEIVED
FEB 27 2012

UDOGM

NOTICE OF APPROVAL

DIV. OF OIL, GAS & MINING



UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
VERNAL FIELD OFFICE

170 South 500 East

VERNAL, UT 84078

(435) 781-4400



CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company: Petroglyph Operating CO., Inc
Well No: Ute Tribal 30-05
API No: 43-013-50935

Location: SWNW, Sec. 30, T5S, R3W
Lease No: 14-20-H62-3519
Agreement: Antelope Creek

OFFICE NUMBER: (435) 781-4400

OFFICE FAX NUMBER: (435) 781-3420

**A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR
FIELD REPRESENTATIVE TO INSURE COMPLIANCE**

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. **This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.**

NOTIFICATION REQUIREMENTS

Construction Activity (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- The Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist shall be notified at least 48 hours in advance of any construction activity. The Ute Tribal office is open Monday through Thursday.
Construction Completion (Notify Ute Tribe Energy & Minerals Dept. and BLM Environmental Scientist)	- Upon completion of the pertinent APD/ROW construction, notify the Ute Tribe Energy & Minerals Dept. for a Tribal Technician to verify the Affidavit of Completion. Notify the BLM Environmental Scientist prior to moving on the drilling rig.
Spud Notice (Notify BLM Petroleum Engineer)	- Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to running casing and cementing all casing strings to: blm_ut_vn_opreport@blm.gov .
BOP & Related Equipment Tests (Notify BLM Supv. Petroleum Tech.)	- Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify BLM Petroleum Engineer)	- Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

**SURFACE USE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

- All areas of disturbance (including surface pipelines) must have appropriate surface use agreements or approvals in place with the proper owner and/or agency before such action is started.
- The conditions as set forth by those owners and/or agencies.

General Conditions of Approval:

- A 30' foot corridor right-of-way shall be approved. Upon completion of each pipeline in corridor, they shall be identified and filed with the Ute Tribe.
- A qualified Archaeologist accompanied by a Tribal Technician will monitor trenching construction of pipeline.
- The Ute Tribe Energy & Minerals Department and the BLM will be notified, in writing 48 hours prior to construction of pipeline.
- Construction Notice shall be given to the department on the Ute Tribe workdays, which are Monday through Thursday. The Company understands that they may be responsible for costs incurred by the Ute Tribe after hours.
- The Company shall inform contractors to maintain construction of pipelines within the approved ROW's.
- The Company shall assure the Ute Tribe that "ALL CONTRACTORS, INCLUDING SUB-CONTRACTORS, LEASING CONTRACTORS, AND ETC." have acquired a current and valid Ute Tribal Business License and have "Access Permits" prior to construction, and will have these permits in all vehicles at all times.
- You are hereby notified that working under the "umbrella" of a company does not allow you to be in the field, and can be subject to those fines of the Ute Tribe Severance Tax Ordinance.
- Any deviation of submitted APD's and ROW applications the Companies will notify the Ute Tribe and BIA in writing and will receive written authorization of any such change with appropriate authorization.
- The Company will implement "Safety and Emergency Plan." The Company's safety director will ensure its compliance.
- All Company employees and/or authorized personnel (sub-contractors) in the field will have approved applicable APD's and/or ROW permits/authorizations on their person(s) during all phases of construction.
- All vehicular traffic, personnel movement, construction/restoration operations shall be confined to the area examined and approved, and to the existing roadways and/or evaluated access routes.

- All personnel will refrain from collecting artifacts, any paleontological fossils, and from disturbing any significant cultural resources in the area.
- The personnel from the Ute Tribe Energy & Minerals Department will be notified should cultural remains from subsurface deposits be exposed or identified during construction. All construction will cease.
- All mitigative stipulations contained in the Bureau of Indian Affairs Site Specific Environmental Assessment (EA) will be strictly adhered.
- Upon completion of Application for Corridor Right-Way, the company will notify the Ute Tribe Energy & Minerals Department, so that a Tribal Technician can verify Affidavit of Completion.

**DOWNHOLE PROGRAM
CONDITIONS OF APPROVAL (COAs)**

SITE SPECIFIC DOWNHOLE COAs:

- Gamma Ray Log shall be run from Total Depth to Surface.
- To effectively protect useable water, cement for the production casing is required to be brought at a minimum 200 feet above the surface casing shoe.
- CBL will be run from PBTD to TOC for the production casing.
- Variances shall be granted for the air drilling of the Surface hole from Onshore Order 2, Subsection III as listed below:
 - a. Blooie line discharge to be approximately 75 feet from well bore and securely anchored.
 - b. A properly lubricated and maintained diverter bowl instead of a rotating head.
 - c. Compressors will be located as close as reasonable to the opposite direction from the blooie line and 75 feet from the well bore.
 - d. An air mist system will be used instead of an automatic igniter on the blooie line.
 - e. A mister will be used instead of deduster equipment at the end of the blooie line.
 - f. Due to the location of the flare pit two "T's" will be utilized on the blooie line.
- Operator will have on location sufficient water to be used as a "mud-kill medium" during the air drilling of the surface hole prior to the well spud.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and **NOT** by the rig pumps. Test shall be reported in the driller's log.

- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- **Cement baskets shall not be run on surface casing.**
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.
- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- **Please submit an electronic copy of all other logs run on this well in LAS format to BLM_UT_VN_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.**
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

OPERATING REQUIREMENT REMINDERS:

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be notified when it is placed in a producing status. Such notification will be by written communication and must be received in this office by not later than the fifth business day following the date on which the well is placed on production. The notification shall provide, as a minimum, the following informational items:
 - Operator name, address, and telephone number.
 - Well name and number.
 - Well location (¼¼, Sec., Twn, Rng, and P.M.).
 - Date well was placed in a producing status (date of first production for which royalty will be paid).
 - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
 - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
 - Unit agreement and/or participating area name and number, if applicable.
 - Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if

performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office Petroleum Engineers will be provided with a date and time for the initial meter calibration and all future meter proving schedules. A copy of the meter calibration reports shall be submitted to the BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover equipment shall be removed from a well to be placed in a suspended status without prior approval of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior approval of the BLM Vernal Field Office shall be obtained and notification given before resumption of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3519
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500, Bosie, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 30-05
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2042 FNL 0353 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 30 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013509350000
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 3/28/2012 <input type="checkbox"/> SPUD REPORT Date of Spud: <input type="checkbox"/> DRILLING REPORT Report Date:
		<input checked="" type="checkbox"/> OTHER	OTHER: Increased Well Head Spacing	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

In order to facilitate the available drill rig, Petroglyph Operating has increased the well head spacing from 20' to 23' between the well referenced above and others on the same location. This well is One of Three being drilled on the same well pad. The original spacing did not provide enough room for the drilling rig we have hired to drill these wells for us. The revised spacing will not require us to disturb any additional surface area. The new location of the well head is the following: 2045' FNL, 353' FWL SWNW Sec. 30, T5S, R3W Duchesne County, Utah. Please see the attached revised plats.

**Accepted by the
Utah Division of
Oil, Gas and Mining**

FOR RECORD ONLY

April 04, 2012

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 4/3/2012	

PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #30-05, #30-05E & #30-05F

LOCATED IN DUCHESNE COUNTY, UTAH

SECTION 30, T5S, R3W, U.S.B.&M.

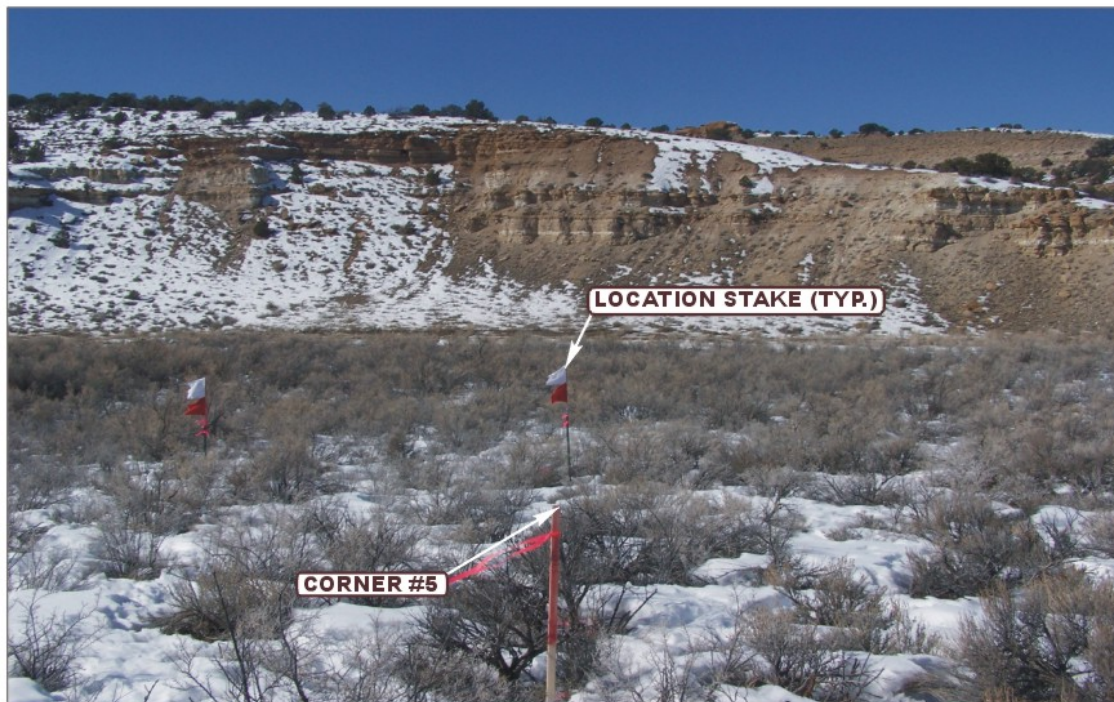


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKES

CAMERA ANGLE: WESTERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHERLY



- Since 1964 -

UELS

Uintah Engineering & Land Surveying

85 South 200 East Vernal, Utah 84078

(435) 789-1017 * FAX (435) 789-1813

LOCATION PHOTOS

03 08 11
MONTH DAY YEAR

PHOTO

TAKEN BY: B.H.

DRAWN BY: S.F.

REVISED:00-00-00

T5S, R3W, U.S.B.&M.

PETROGLYPH OPERATING CO., INC.

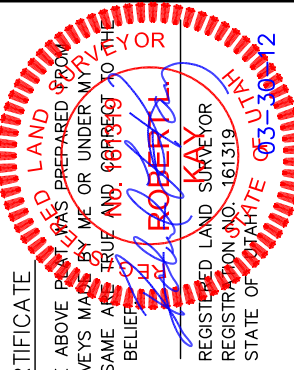
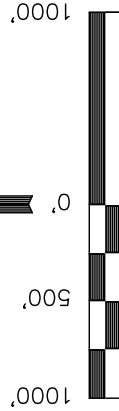
Well location, UTE TRIBAL #30-05, located as shown in the SW 1/4 NW 1/4 of Section 30, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 8, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6191.3 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



THIS IS TO CERTIFY THAT THE ABOVE POINT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY CLOSE SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH

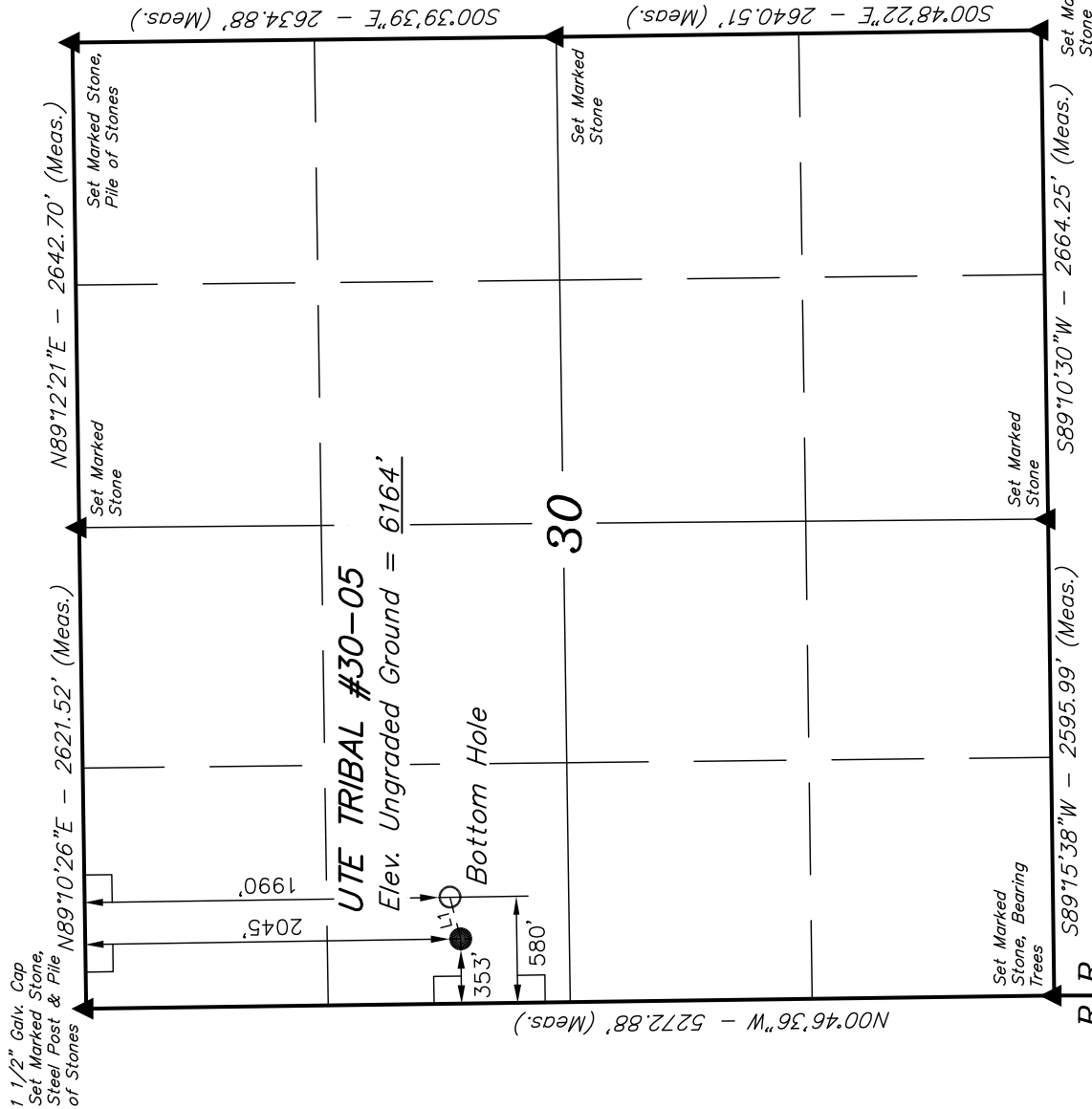
REVISED: 03-29-12 N.S.

UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 02-16-11	DATE DRAWN: 02-23-11
PARTY B.H. K.P. C.H.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE	
		PETROGLYPH OPERATING CO., INC.



LINE TABLE		
LINE	BEARING	LENGTH
L1	N75°30'58"E	233.82'

LEGEND:

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED

NAD 83 (TARGET BOTTOM HOLE)		NAD 83 (SURFACE LOCATION)	
LATITUDE = 40°01'09.78" (40.019383)		LATITUDE = 40°01'09.23" (40.019231)	
LONGITUDE = 110°16'22.55" (110.272931)		LONGITUDE = 110°16'25.48" (110.273744)	
NAD 27 (TARGET BOTTOM HOLE)		NAD 27 (SURFACE LOCATION)	
LATITUDE = 40°01'09.92" (40.019422)		LATITUDE = 40°01'09.37" (40.019269)	
LONGITUDE = 110°16'20.00" (110.272222)		LONGITUDE = 110°16'22.93" (110.273036)	

T5S, R3W, U.S.B.&M.

PETROGLYPH OPERATING CO., INC.

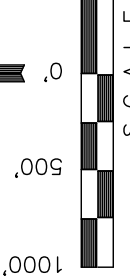
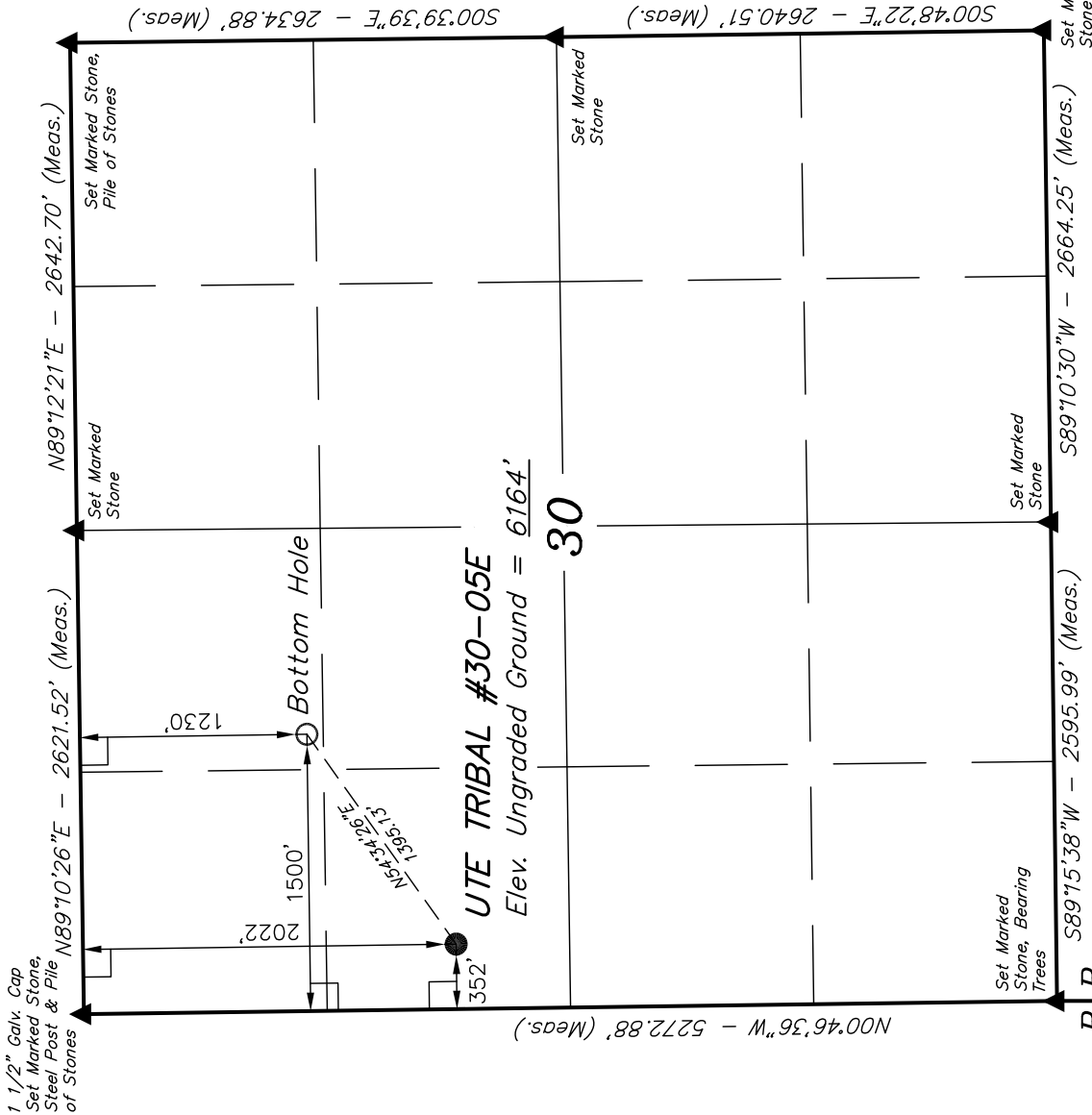
Well location, UTE TRIBAL #30-05E, located as shown in the SW 1/4 NW 1/4 of Section 30, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 8, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6191.3 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



UNTAH ENGINEERING & LAND SURVEYING			
85 SOUTH 200 EAST - VERNAL, UTAH 84078			
(435) 789-1017			
SCALE	1" = 1000'	DATE SURVEYED:	02-16-11
PARTY	B.H. K.P. C.H.	DATE DRAWN:	02-23-11
WEATHER	COOL	REFERENCES	G.L.O. PLAT
		FILE	PETROGLYPH OPERATING CO., INC.

LEGEND:

- 90° SYMBOL
- PROPOSED WELL HEAD.
- SECTION CORNERS LOCATED

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°01'17.30" (40.021472)	LATITUDE = 40°01'09.46" (40.019294)
LONGITUDE = 110°16'10.73" (110.269647)	LONGITUDE = 110°16'25.49" (110.273747)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°01'17.44" (40.021511)	LATITUDE = 40°01'09.60" (40.019333)
LONGITUDE = 110°16'08.18" (110.268939)	LONGITUDE = 110°16'22.94" (110.273039)

T5S, R3W, U.S.B.&M.

PETROGLYPH OPERATING CO., INC.

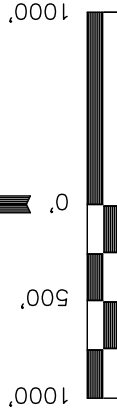
Well location, UTE TRIBAL #30-05F, located as shown in the SW 1/4 NW 1/4 of Section 30, T5S, R3W, U.S.B.&M., Duchesne County, Utah.

BASIS OF ELEVATION

BRASS CAP SET IN CONCRETE BY SUNRISE ENGINEERING LOCATED IN THE SE 1/4 OF SECTION 8, T5S, R3W, U.S.B.&M. SAID ELEVATION IS MARKED AS BEING 6191.3 FEET.

BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE POINT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY CLOSE SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

ROBERT L. KAY
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161319
STATE OF UTAH
03-30-12

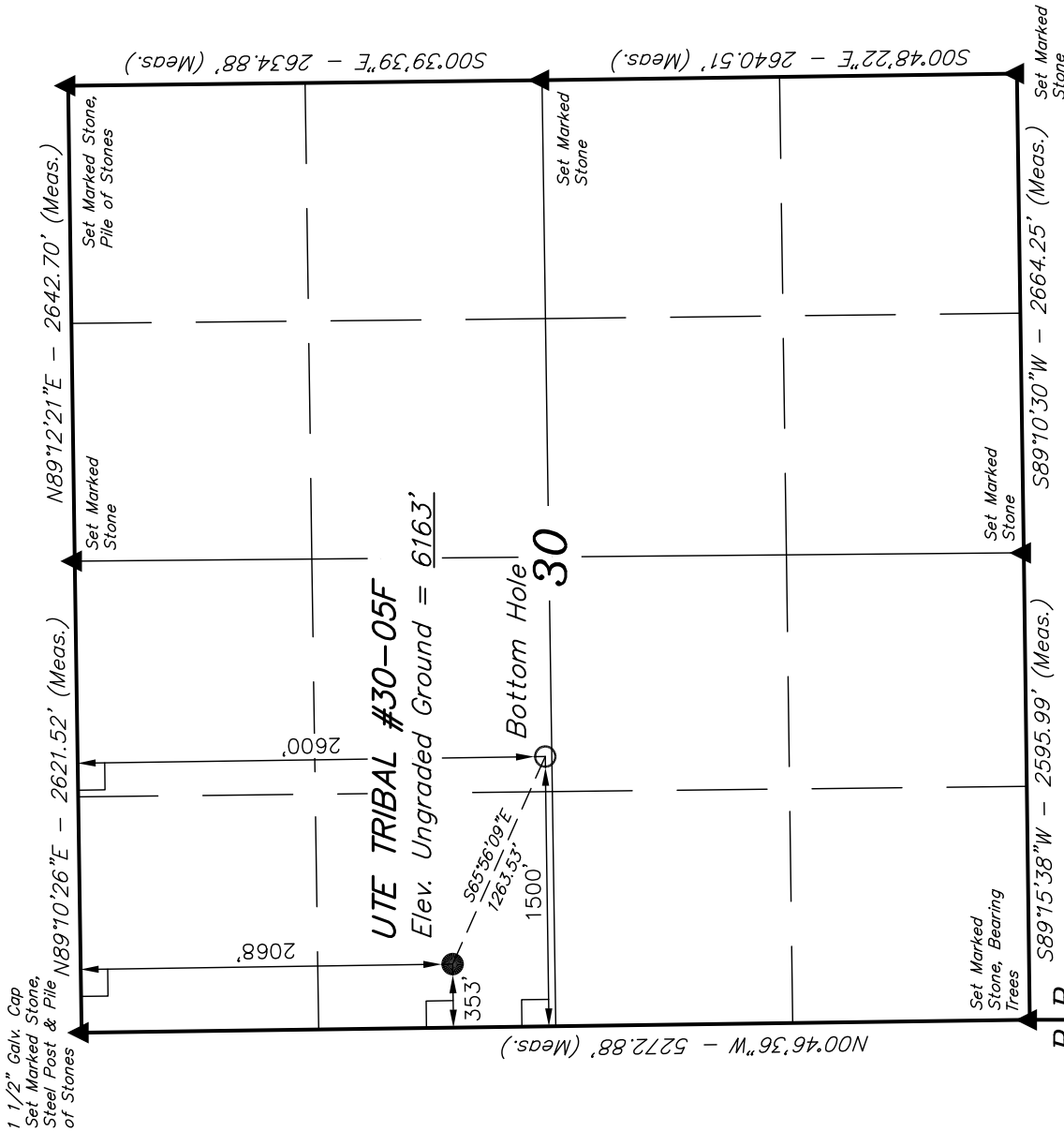
REVISED: 03-29-12 N.S.

UINTAH ENGINEERING & LAND SURVEYING

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 02-16-11	DATE DRAWN: 02-23-11
PARTY B.H. K.P. C.H.	REFERENCES G.L.O. PLAT	
WEATHER COOL	FILE	
		PETROGLYPH OPERATING CO., INC.



LEGEND:

— = 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED

NAD 83 (TARGET BOTTOM HOLE)	NAD 83 (SURFACE LOCATION)
LATITUDE = 40°01'03.76" (40.017711)	LATITUDE = 40°01'09.01" (40.019169)
LONGITUDE = 110°16'10.74" (110.269650)	LONGITUDE = 110°16'25.47" (110.273742)
NAD 27 (TARGET BOTTOM HOLE)	NAD 27 (SURFACE LOCATION)
LATITUDE = 40°01'03.90" (40.017750)	LATITUDE = 40°01'09.15" (40.019208)
LONGITUDE = 110°16'08.19" (110.268942)	LONGITUDE = 110°16'22.92" (110.273033)

PETROGLYPH OPERATING CO., INC.

LOCATION LAYOUT FOR

UTE TRIBAL #30-05, #30-05E & #30-05F
SECTION 30, T5S, R3W, U.S.B.&M.

C-05' SW 1/4 NW 1/4

El. 61.0'

FIGURE #1

SCALE: 1" = 50'

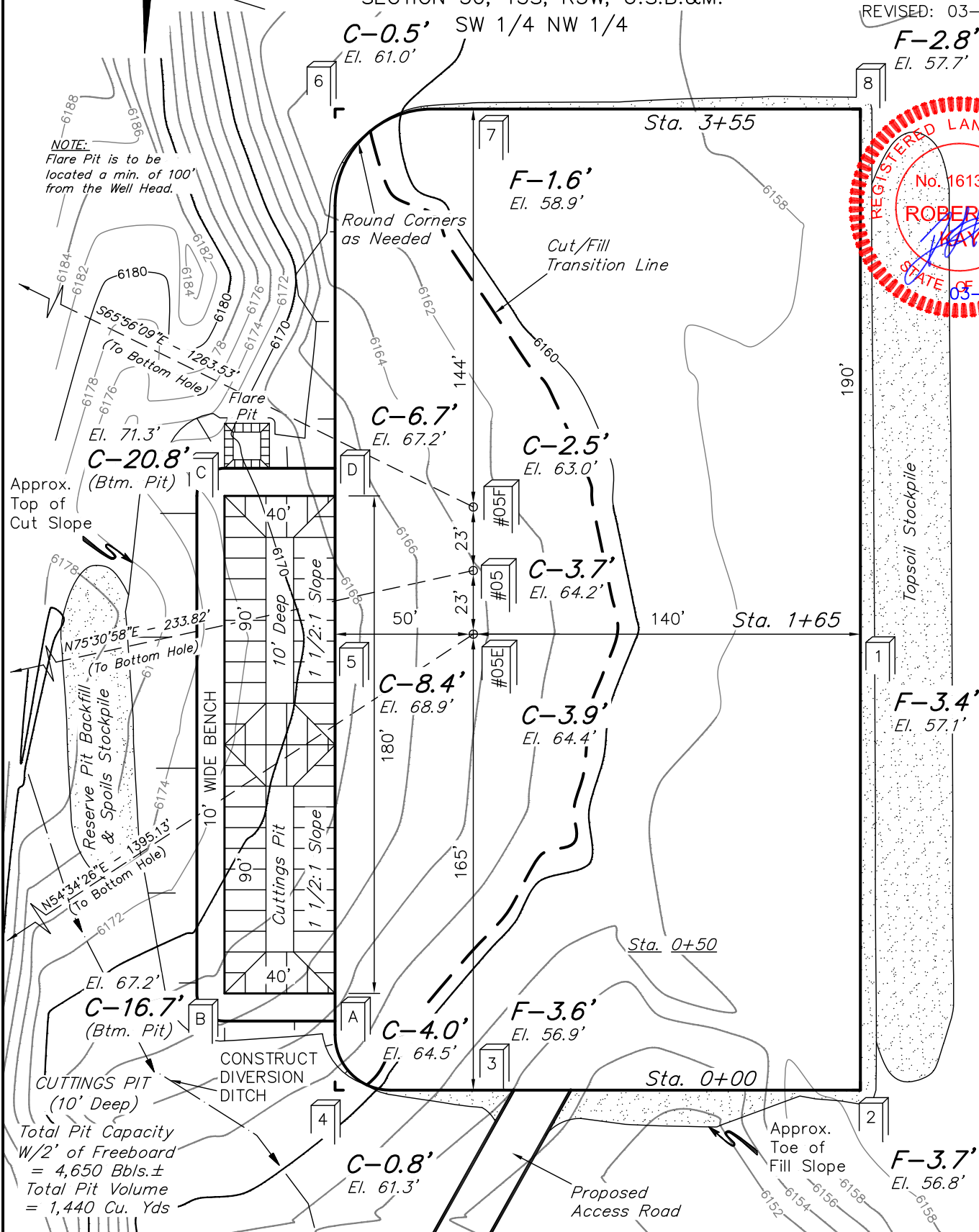
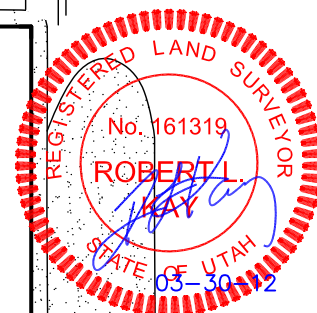
DATE: 02-23-11

DRAWN BY: C.H.

REVISÉ: 03-29-12 N.S.

F-2.8'

El. 57.7'



Elev. Ungraded Ground At #30-05 Loc. Stake = **6164.4'**
FINISHED GRADE ELEV. AT #30-05 LOC. STAKE = **6160.5'**

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

RECEIVED: Apr. 03, 2012

PETROGLYPH OPERATING CO., INC.

FIGURE #2

TYPICAL CROSS SECTIONS FOR

UTE TRIBAL #30-05, #30-05E & #30-05F

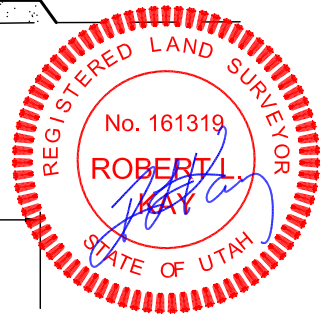
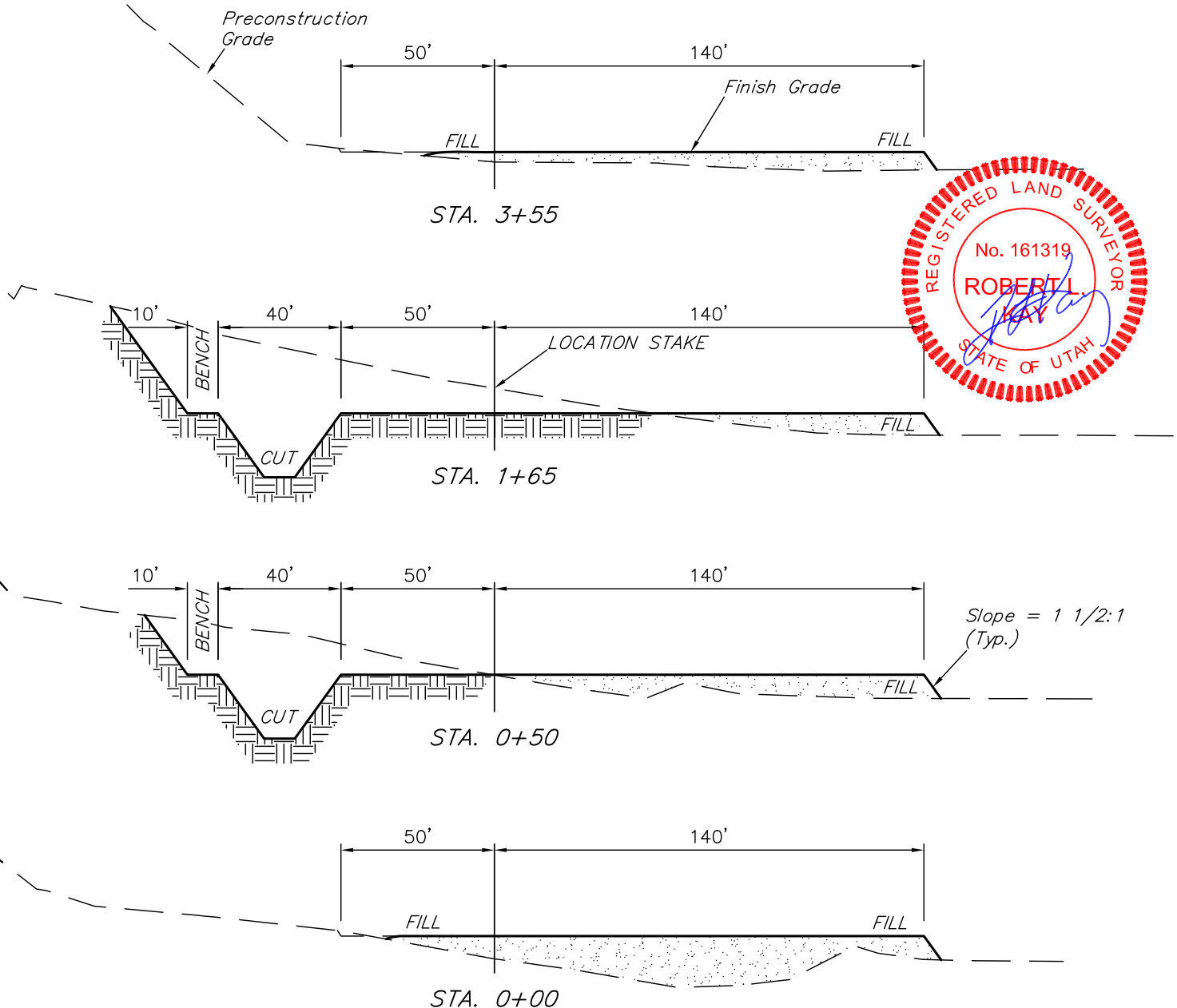
SECTION 30, T5S, R3W, U.S.B.&M.

SW 1/4 NW 1/4

X-Section
Scale
1" = 50'

DATE: 02-23-11

DRAWN BY: C.H.



NOTE:

Topsoil should not be Stripped Below Finished Grade on Substructure Area.

APPROXIMATE ACREAGES

WELL SITE DISTURBANCE = ± 3.447 ACRES
ACCESS ROAD DISTURBANCE = ± 0.419 ACRES
PIPELINE DISTURBANCE = ± 1.021 ACRES
TOTAL = ± 4.887 ACRES

* NOTE:
FILL QUANTITY INCLUDES 5% FOR COMPACTION

APPROXIMATE YARDAGES

(12") Topsoil Stripping = 3,350 Cu. Yds.
Remaining Location = 7,230 Cu. Yds.
TOTAL CUT = 10,580 CU.YDS.
FILL = 6,510 CU.YDS.

EXCESS MATERIAL = 4,070 Cu. Yds.
Topsoil & Pit Backfill = 4,070 Cu. Yds.
(1/2 Pit Vol.)
EXCESS UNBALANCE = 0 Cu. Yds.
(After Interim Rehabilitation)

UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

RECEIVED: Apr. 03, 2012



PETROGLYPH OPERATING CO., INC.

TYPICAL RIG LAYOUT FOR

UTE TRIBAL #30-05, #30-05E & #30-05F
SECTION 30, T5S, R3W, U.S.B.&M.
SW 1/4 NW 1/4

FIGURE #3

SCALE: 1" = 50'

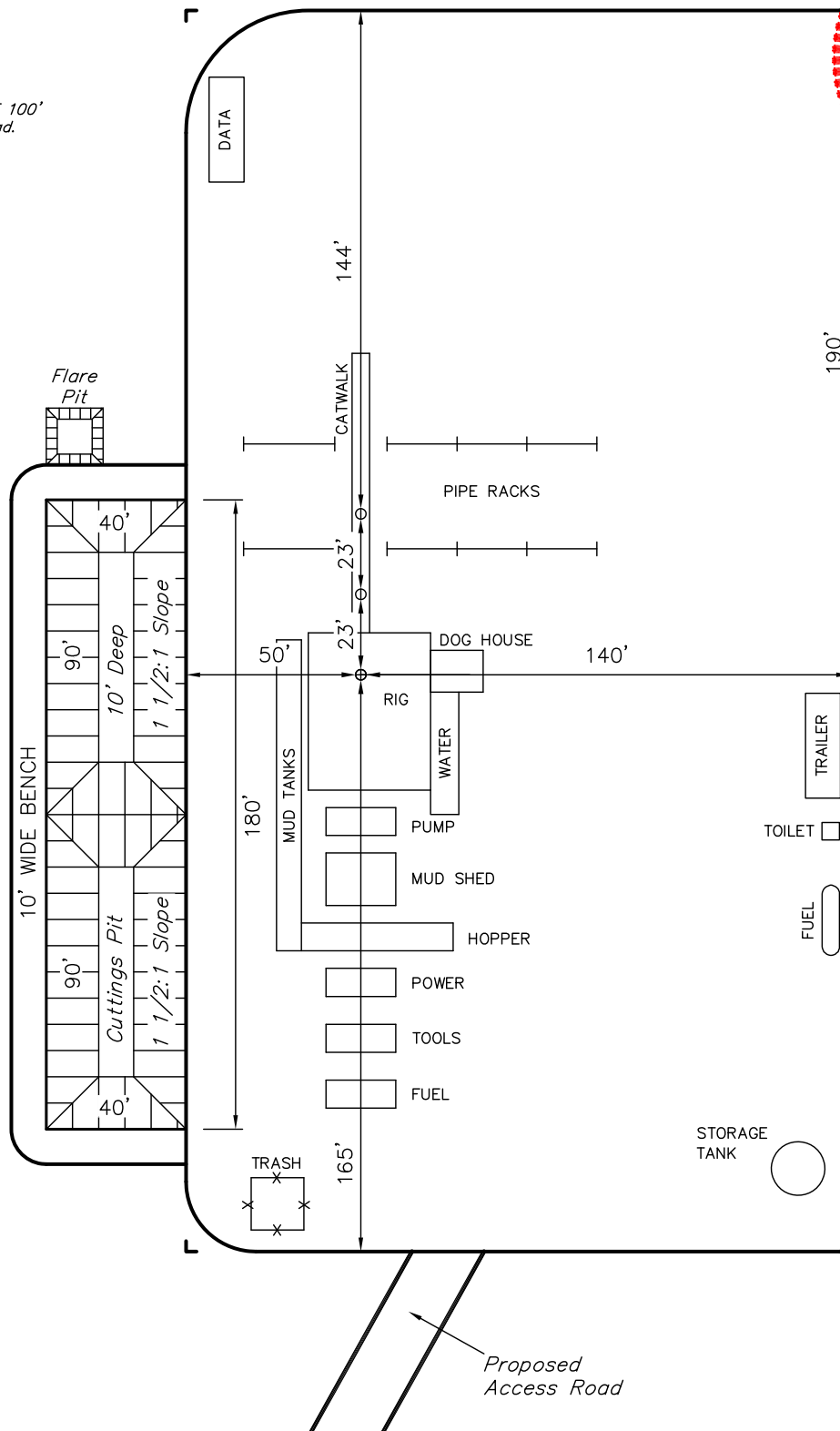
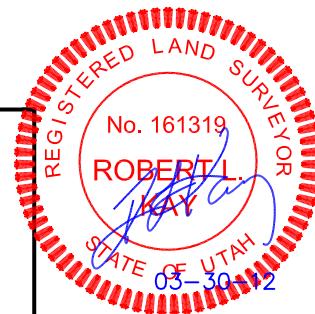
DATE: 02-23-11

DRAWN BY: C.H.

REVISED: 03-29-12 N.S.

NOTE:

Flare Pit is to be located a min. of 100' from the Well Head.



CUTTINGS PIT
(10' Deep)

Total Pit Capacity
W/2' of Freeboard
= 4,650 Bbls.±
Total Pit Volume
= 1,440 Cu. Yds

UINTAH ENGINEERING & LAND SURVEYING

85 So. 200 East * Vernal, Utah 84078 * (435) 789-1017

RECEIVED: Apr. 03, 2012

*PETROGLYPH OPERATING CO., INC.
UTE TRIBAL #30-05, #30-05E & #30-05F
ROAD RIGHT-OF-WAY & SURFACE USE AREA
SECTION 30, T5S, R3W, U.S.B.&M.*

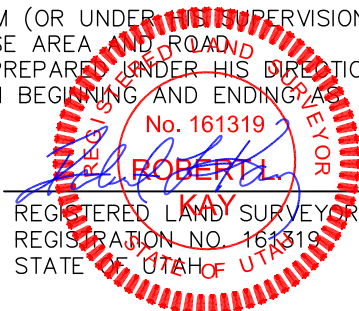
TOTAL ROAD RIGHT-OF-WAY ON UTE TRIBAL LANDS

TOTAL LENGTH OF RIGHT-OF-WAY IS 607.90' OR 0.115 MILES. WIDTH OF RIGHT-OF-WAY IS 30' (15' PERPENDICULAR ON EACH SIDE OF THE CENTERLINE). CONTAINS 0.419 ACRES MORE OR LESS.

ENGINEER'S AFFIDAVIT

STATE OF UTAH)
COUNTY OF UTAH) SS

ROBERT L. KAY, BEING FIRST DULY SWORN DEPOSES AND STATES THAT HE IS THE REGISTERED LAND SURVEYOR, FOR PETROGLYPH OPERATING CO., INC., THAT THESE SURVEYS WERE MADE BY HIM (OR UNDER HIS SUPERVISION): THAT HE HAS EXAMINED THE FIELD NOTES OF THE SURVEYS OF THE SURFACE USE AREA AND ROAD RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP, THAT THIS MAP WAS PREPARED UNDER HIS DIRECTION FROM SAID FIELD NOTES; AND THAT SAID RIGHT-OF-WAY, 0.115 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN ON THIS MAP IS ACCURATELY REPRESENTED.



ACKNOWLEDGEMENT

SUBSCRIBED AND SWORN BEFORE ME THIS ____ DAY OF _____ 2011.

MY COMMISSION EXPIRES _____.

NOTARY PUBLIC
VERNAL, UTAH

APPLICANT'S CERTIFICATE

I, ED TROTTER, DO HEREBY CERTIFY THAT I AM THE AGENT FOR PETROGLYPH OPERATING CO., INC., HEREINAFTER DESIGNATED THE APPLICANT; THAT ROBERT L. KAY WHO SUBSCRIBED TO THE FOREGOING AFFIDAVIT, IS EMPLOYED BY THE APPLICANT AS A LAND SURVEYOR AND THAT HE WAS DIRECTED BY THE APPLICANT TO SURVEY THE LOCATION OF THIS SURFACE USE AREA AND ROAD RIGHT-OF-WAY, 0.115 MILES IN LENGTH BEGINNING AT STA. 0+00 AND ENDING AT STA. 6+07.90, THAT SAID SURFACE USE AREA AND ROAD RIGHT-OF-WAY ARE ACCURATELY REPRESENTED ON THIS MAP; THAT SUCH SURVEY AS REPRESENTED ON THIS MAP HAS BEEN ADOPTED BY THE APPLICANT AS THE DEFINITE LOCATION OF THE RIGHT-OF-WAY THEREBY SHOWN; AND THAT THE MAP HAS BEEN PREPARED TO BE FILED WITH THE SECRETARY OF THE INTERIOR OR HIS DULY AUTHORIZED REPRESENTATIVE AS PART OF THE APPLICATION FOR SAID RIGHT-OF-WAY TO BE GRANTED THE APPLICANT, ITS SUCCESSORS AND ASSIGNS, WITH THE RIGHT TO CONSTRUCT, MAINTAIN, AND REPAIR IMPROVEMENTS, THEREON AND THEREOVER, FOR SUCH PURPOSES, AND WITH THE FURTHER RIGHT IN THE APPLICANT, ITS SUCCESSORS AND ASSIGNS TO TRANSFER THIS RIGHT-OF-WAY BY ASSIGNMENT, GRANT, OR OTHERWISE.

APPLICANT

AGENT

TITLE

RECEIVED: Apr. 03, 2012

*PETROGLYPH OPERATING CO., INC.
UTE TRIBAL #30-05, #30-05E & #30-05F
PIPELINE RIGHT-OF-WAY
SECTION 30, T5S, R3W, U.S.B.&M.*

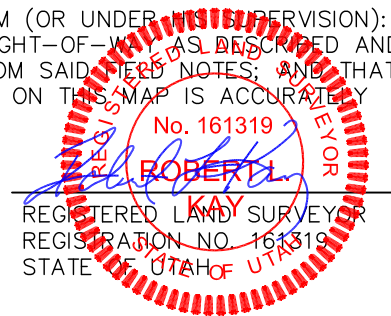
TOTAL PIPELINE RIGHT-OF-WAY ON UTE TRIBAL LANDS

TOTAL LENGTH OF RIGHT-OF-WAY IS 1482.15' OR 0.281 MILES. WIDTH OF RIGHT-OF-WAY IS 30' (15' PERPENDICULAR ON EACH SIDE OF THE CENTERLINE). CONTAINS 1.021 ACRES MORE OR LESS.

ENGINEER'S AFFIDAVIT

STATE OF UTAH)
) SS
COUNTY OF UINTAH)

ROBERT L. KAY, BEING FIRST DULY SWORN DEPOSES AND STATES THAT HE IS THE REGISTERED LAND SURVEYOR, FOR PETROGLYPH OPERATING CO., INC. THAT THESE SURVEYS WERE MADE BY HIM (OR UNDER HIS SUPERVISION): THAT HE HAS EXAMINED THE FIELD NOTES OF THE SURVEYS OF THE PIPELINE RIGHT-OF-WAY AS DESCRIBED AND SHOWN ON THIS MAP, THAT THIS MAP WAS PREPARED UNDER HIS DIRECTION FROM SAID FIELD NOTES; AND THAT SAID RIGHT-OF-WAY, 0.281 MILES IN LENGTH BEGINNING AND ENDING AS SHOWN ON THIS MAP IS ACCURATELY REPRESENTED.



ACKNOWLEDGEMENT

SUBSCRIBED AND SWORN BEFORE ME THIS ____ DAY OF _____ 2011.

MY COMMISSION EXPIRES _____.

NOTARY PUBLIC
VERNAL, UTAH

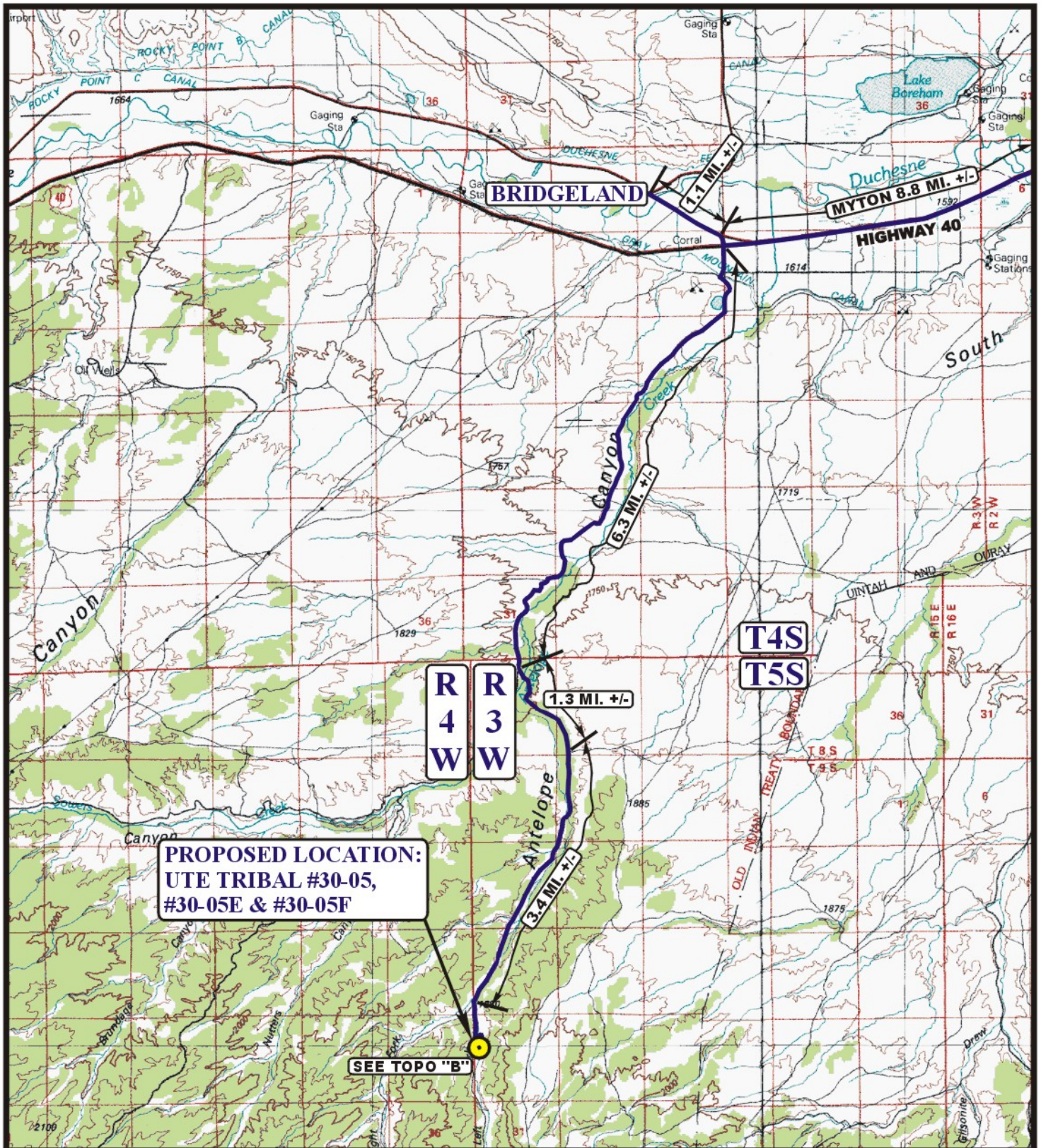
APPLICANT'S CERTIFICATE

I, ED TROTTER, DO HEREBY CERTIFY THAT I AM THE AGENT FOR PETROGLYPH OPERATING CO., INC. HEREINAFTER DESIGNATED THE APPLICANT; THAT ROBERT L. KAY WHO SUBSCRIBED TO THE FOREGOING AFFIDAVIT, IS EMPLOYED BY THE APPLICANT AS A LAND SURVEYOR AND THAT HE WAS DIRECTED BY THE APPLICANT TO SURVEY THE LOCATION OF THIS PIPELINE RIGHT-OF-WAY, 0.281 MILES IN LENGTH BEGINNING AT STA. 0+00 AND ENDING AT STA. 14+82.15, THAT SAID PIPELINE RIGHT-OF-WAY IS ACCURATELY REPRESENTED ON THIS MAP; THAT SUCH SURVEY AS REPRESENTED ON THIS MAP HAS BEEN ADOPTED BY THE APPLICANT AS THE DEFINITE LOCATION OF THE RIGHT-OF-WAY THEREBY SHOWN; AND THAT THE MAP HAS BEEN PREPARED TO BE FILED WITH THE SECRETARY OF THE INTERIOR OR HIS DULY AUTHORIZED REPRESENTATIVE AS PART OF THE APPLICATION FOR SAID RIGHT-OF-WAY TO BE GRANTED THE APPLICANT, ITS SUCCESSORS AND ASSIGNS, WITH THE RIGHT TO CONSTRUCT, MAINTAIN, AND REPAIR IMPROVEMENTS, THEREON AND THEREOVER, FOR SUCH PURPOSES, AND WITH THE FURTHER RIGHT IN THE APPLICANT, ITS SUCCESSORS AND ASSIGNS TO TRANSFER THIS RIGHT-OF-WAY BY ASSIGNMENT, GRANT, OR OTHERWISE.

APPLICANT

AGENT

TITLE



LEGEND:

● PROPOSED LOCATION

PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #30-05, #30-05E & #30-05F
SECTION 30, T5S, R3W, U.S.B.&M.
SW 1/4 NW 1/4



Utah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

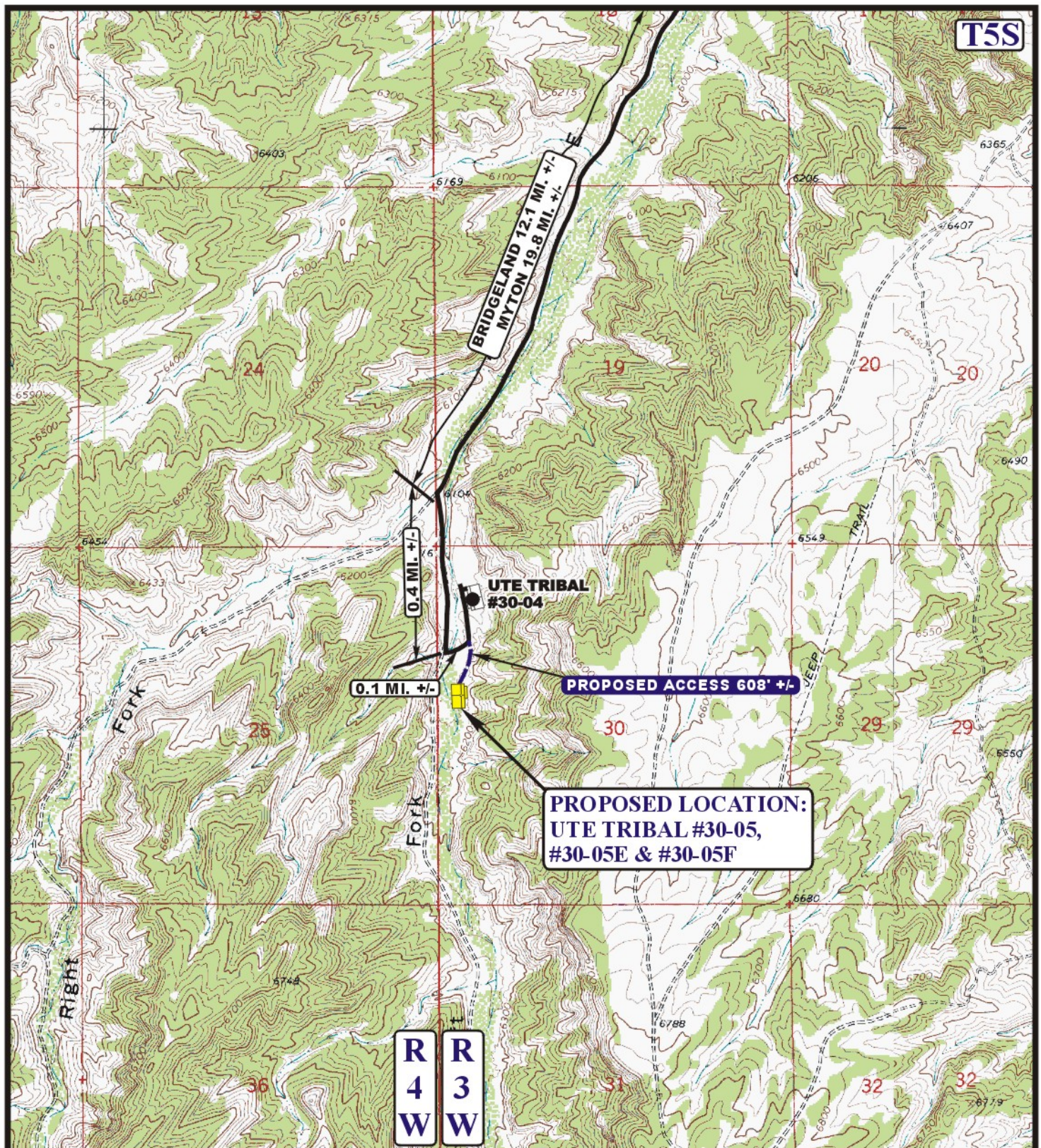


ACCESS ROAD
MAP

03 08 11
MONTH DAY YEAR

SCALE: 1:100,000 DRAWN BY: S.F. REVISED: 00-00-00





LEGEND:

———— EXISTING ROAD
- - - - - PROPOSED ACCESS ROAD



PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #30-05, #30-05E & #30-05F
SECTION 30, T5S, R3W, U.S.B.&M.
SW 1/4 NW 1/4



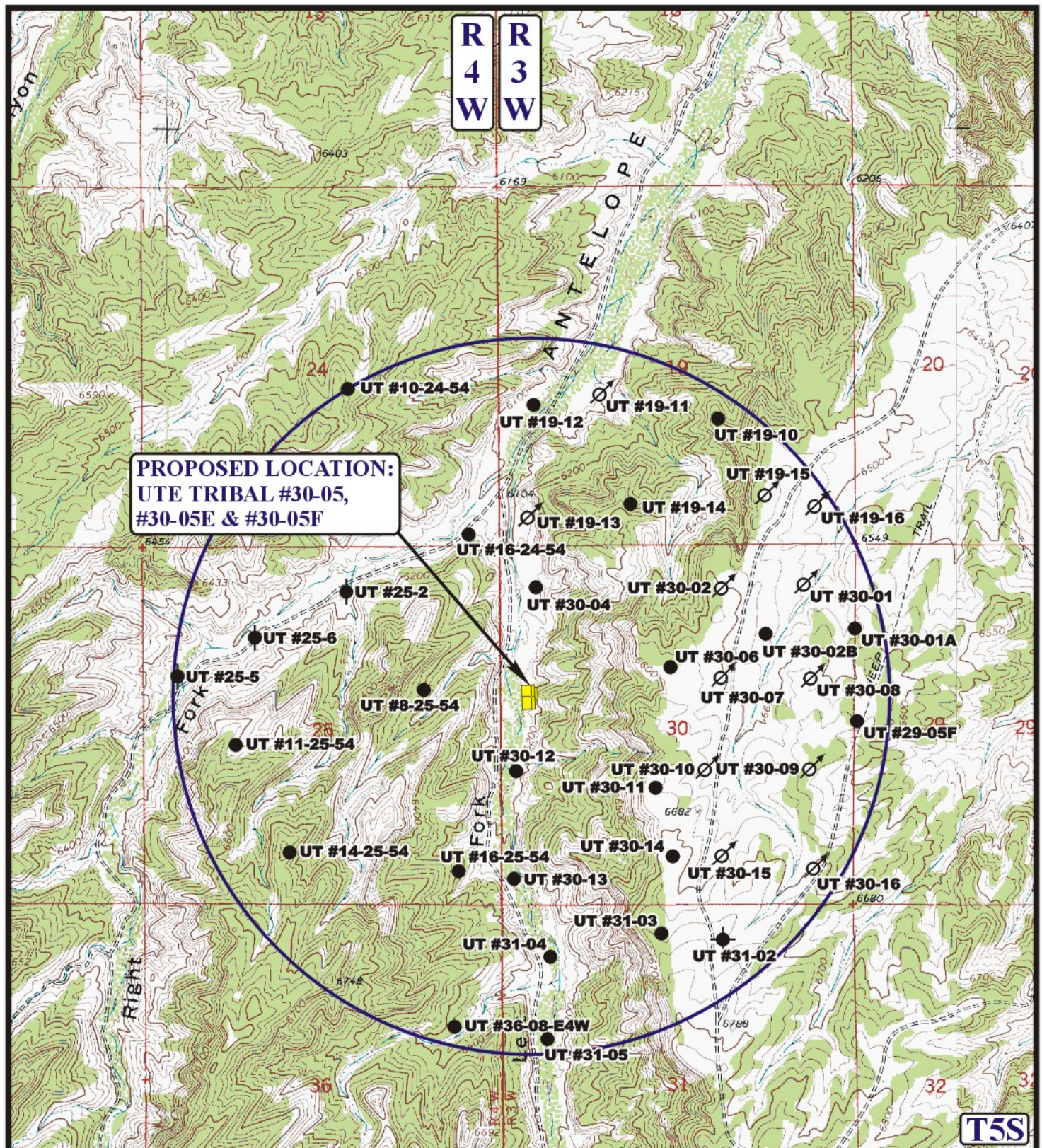
Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813

ACCESS ROAD
MAP

03 08 11
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: S.F. REVISED: 00-00-00

B
TOPO



LEGEND:

- | | |
|-------------------|-------------------------|
| ⊘ DISPOSAL WELLS | ⊘ WATER WELLS |
| ● PRODUCING WELLS | ● ABANDONED WELLS |
| ● SHUT IN WELLS | ● TEMPORARILY ABANDONED |

PETROGLYPH OPERATING CO., INC.

UTE TRIBAL #30-05, #30-05E & #30-05F
SECTION 30, T5S, R3W, U.S.B.&M.
SW 1/4 NW 1/4



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
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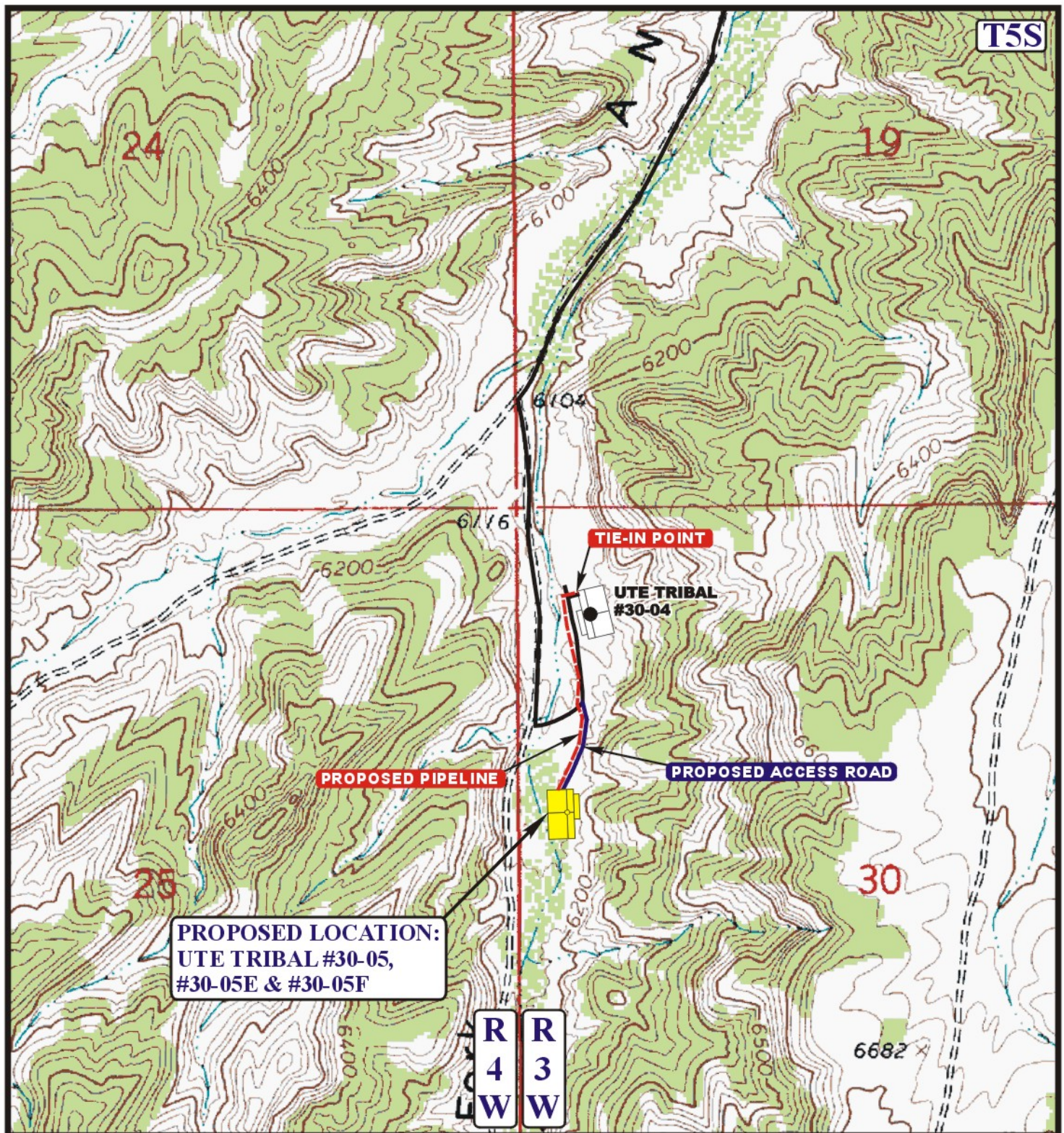


ACCESS ROAD
MAP

03 08 11
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: S.F. REVISED: 00-00-00





APPROXIMATE TOTAL PIPELINE DISTANCE = 1,482' +/-

LEGEND:

——— PROPOSED ACCESS ROAD
- - - - - PROPOSED PIPELINE



PETROGLYPH OPERATING CO., INC.

**UTE TRIBAL #30-05, #30-05E & #30-05F
 SECTION 30, T5S, R3W, U.S.B.&M.
 SW 1/4 NW 1/4**



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

**TOPOGRAPHIC
 MAP**

03 08 11
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: S.F. REVISED: 00-00-00

**D
 TOPO**

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3519
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500, Bosie, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 30-05
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2042 FNL 0353 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 30 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013509350000
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input checked="" type="checkbox"/> SPUD REPORT Date of Spud: 3/29/2012	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input style="width: 100px;" type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 We spudded this well on 03/29/2012. We set 100' of 14" conductor.

Accepted by the
 Utah Division of
 Oil, Gas and Mining
FOR RECORD ONLY
 April 04, 2012

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 4/2/2012	

CONFIDENTIAL

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Craig's /Air rig
Submitted By Rodrigo Jurado Phone Number 435-722-5302
Well Name/Number Ute Tribal 30-05
Qtr/Qtr SWNW Section 30 Township 5S Range 3W
Lease Serial Number 14-20-H62-3519
API Number 43-013-50935

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time 3/28/2012 08:00 AM ☒ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☐ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

RECEIVED

MAR 28 2012

DIV. OF OIL, GAS & MINING

Date/Time _____ AM ☐ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time _____ AM ☐ PM ☐

Remarks We hope to spud and set 40' of 14" conductor.

BLM - Vernal Field Office - Notification Form

Operator Petroglyph Operating Rig Name/# Craig's /Air rig
 Submitted By Rodrigo Jurado Phone Number 435-722-5302
 Well Name/Number Ute Tribal 30-05
 Qtr/Qtr SWNW Section 30 Township 5S Range 3W
 Lease Serial Number 14-20-H62-3519
 API Number 43-013-50935

Spud Notice – Spud is the initial spudding of the well, not drilling out below a casing string.

Date/Time _____ AM ☐ PM ☐

Casing – Please report time casing run starts, not cementing times.

- ☒ Surface Casing
- ☐ Intermediate Casing
- ☐ Production Casing
- ☐ Liner
- ☐ Other

RECEIVED

APR 02 2012

DIV. OF OIL, GAS & MINING

Date/Time 04/2/2012 5:00 AM ☒ PM ☐

BOPE

- ☐ Initial BOPE test at surface casing point
- ☐ BOPE test at intermediate casing point
- ☐ 30 day BOPE test
- ☐ Other

Date/Time _____ AM ☐ PM ☐

Remarks We intend to run 8 5/8" surface casing to approx 480' MD. (sent 4/1/2012)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 6

ENTITY ACTION FORM

Operator: Petroglyph Operating Company Operator Account Number: N 3800
Address: P.O. Box 607
city Roosevelt
state UT zip 84066 Phone Number: (435) 722-2531

Well 1

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301350944	Ute Tribal 30-05F		SWNW	30	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	new	17577	3/28/2012			4/24/12	
Comments: Please add to existing Ute Tribal 30-04 TB							CONFIDENTIAL
GRRV							

Well 2

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301350935	Ute Tribal 30-05		SWNW	30	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	new	17577	3/29/2012			4/24/12	
Comments: Please add to existing Ute Tribal 30-04 TB							CONFIDENTIAL
GRRV							

Well 3

API Number	Well Name		QQ	Sec	Twp	Rng	County
4301350936	Ute Tribal 30-05E		SWNW	30	5S	3W	Duchesne
Action Code	Current Entity Number	New Entity Number	Spud Date			Entity Assignment Effective Date	
B	new	17577	3/30/2012			4/24/12	
Comments: Please add to existing Ute Tribal 30-04 TB							CONFIDENTIAL
GRRV							

ACTION CODES:

- A - Establish new entity for new well (single well only)
- B - Add new well to existing entity (group or unit well)
- C - Re-assign well from one existing entity to another existing entity
- D - Re-assign well from one existing entity to a new entity
- E - Other (Explain in 'comments' section)

Rodrigo Jurado

Name (Please Print)

Rodrigo Jurado
Signature

Regulatory Compliance Spc

3/30/2012

Title

Date

RECEIVED

APR 22 2012

Div. of Oil, Gas & Mining

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3519
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500, Bosie, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 30-05
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2042 FNL 0353 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 30 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013509350000
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 5/15/2012	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input checked="" type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

 All produced water will be trucked or pumped through pipeline to a water injection stations for injection. Water injection stations are located at the following: Ute Tribal 21-11 NESW Section 21, T5S, R3W, Duchesne County, Utah. Ute Tribal 18-08 SENE Section 18, T5S, R3W, Duchesne County, Utah. Ute Tribal 34-12D3 NWSW Section 34, T4S, R3W, Duchesne County, Utah.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 May 17, 2012

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 4/13/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3519
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500, Bosie, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 30-05
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2042 FNL 0353 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 30 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013509350000
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 5/1/2012	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE <input type="checkbox"/> PRODUCTION START OR RESUME <input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input checked="" type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION OTHER: <input style="width: 100px;" type="text"/>
<input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:			
<input type="checkbox"/> SPUD REPORT Date of Spud:			
<input type="checkbox"/> DRILLING REPORT Report Date:			

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.
 Sometime between 6/1/2012 and 6/18/2012, depending on equipment availability, Petroglyph Operating intends to perforate and frac the following intervals: 4096'-4107', 4342-4352, 4409.5-4438, 4577-4578.5, 4588-4590, 4612-4618, 4748-4752, 5070.5-5072, 5083.5-5085.5, 5113-5120, 5152.5-5158. We intend to perforate with Titan 3 1/8" Perf guns containing 22.7 gram chaarges, .42" EHD, 23.54 TTP @ 4 spf @ 120* phased. We intend to frac using Delta 140 15# gelled fluid and 20/40 mesh sand, volumes and amounts to be reported at a later date.

Accepted by the
Utah Division of
Oil, Gas and Mining

Date: May 30, 2012

By: *Derek Quist*

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 5/29/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3519
1. TYPE OF WELL Oil Well		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500, Bosie, ID, 83703		8. WELL NAME and NUMBER: UTE TRIBAL 30-05
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2042 FNL 0353 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 30 Township: 05.0S Range: 03.0W Meridian: U		9. API NUMBER: 43013509350000
9. FIELD and POOL or WILDCAT: ANTELOPE CREEK		COUNTY: DUCHESNE
STATE: UTAH		

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE <input type="checkbox"/> CHANGE TO PREVIOUS PLANS <input type="checkbox"/> CHANGE WELL STATUS <input type="checkbox"/> DEEPEN <input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> ALTER CASING <input type="checkbox"/> CHANGE TUBING <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS <input type="checkbox"/> FRACTURE TREAT <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> RECLAMATION OF WELL SITE <input type="checkbox"/> SIDETRACK TO REPAIR WELL <input type="checkbox"/> VENT OR FLARE <input type="checkbox"/> SI TA STATUS EXTENSION <input type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR <input type="checkbox"/> CHANGE WELL NAME <input type="checkbox"/> CONVERT WELL TYPE <input type="checkbox"/> NEW CONSTRUCTION <input type="checkbox"/> PLUG BACK <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION <input type="checkbox"/> TEMPORARY ABANDON <input type="checkbox"/> WATER DISPOSAL <input type="checkbox"/> APD EXTENSION	OTHER: <input style="width: 100px;" type="text"/>
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 6/28/2012	<input type="checkbox"/> REPERFORATE CURRENT FORMATION <input type="checkbox"/> TUBING REPAIR <input type="checkbox"/> WATER SHUTOFF <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input checked="" type="checkbox"/> PRODUCTION START OR RESUME		
<input type="checkbox"/> SPUD REPORT Date of Spud:				
<input type="checkbox"/> DRILLING REPORT Report Date:				

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

The date of first production for this well was 06/28/2012.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 July 03, 2012

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A	DATE 7/3/2012	

STATE OF UTAH DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING		FORM 9
SUNDRY NOTICES AND REPORTS ON WELLS Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.		5. LEASE DESIGNATION AND SERIAL NUMBER: 14-20-H62-3519
		6. IF INDIAN, ALLOTTEE OR TRIBE NAME: UTE
1. TYPE OF WELL Oil Well		7. UNIT or CA AGREEMENT NAME: ANTELOPE CREEK
2. NAME OF OPERATOR: PETROGLYPH OPERATING CO		8. WELL NAME and NUMBER: UTE TRIBAL 30-05
3. ADDRESS OF OPERATOR: 960 Broadway Ave, Ste 500, Bosie, ID, 83703		9. API NUMBER: 43013509350000
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2042 FNL 0353 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: SWNW Section: 30 Township: 05.0S Range: 03.0W Meridian: U		9. FIELD and POOL or WILDCAT: ANTELOPE CREEK
		COUNTY: DUCHESNE
		STATE: UTAH

11.

CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
<input type="checkbox"/> NOTICE OF INTENT Approximate date work will start:	<input type="checkbox"/> ACIDIZE	<input type="checkbox"/> ALTER CASING	<input type="checkbox"/> CASING REPAIR	
<input checked="" type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion: 6/28/2012	<input type="checkbox"/> CHANGE TO PREVIOUS PLANS	<input type="checkbox"/> CHANGE TUBING	<input type="checkbox"/> CHANGE WELL NAME	
<input type="checkbox"/> SPUD REPORT Date of Spud:	<input type="checkbox"/> CHANGE WELL STATUS	<input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS	<input type="checkbox"/> CONVERT WELL TYPE	
<input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> DEEPEN	<input checked="" type="checkbox"/> FRACTURE TREAT	<input type="checkbox"/> NEW CONSTRUCTION	
	<input type="checkbox"/> OPERATOR CHANGE	<input type="checkbox"/> PLUG AND ABANDON	<input type="checkbox"/> PLUG BACK	
	<input type="checkbox"/> PRODUCTION START OR RESUME	<input type="checkbox"/> RECLAMATION OF WELL SITE	<input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION	
	<input type="checkbox"/> REPERFORATE CURRENT FORMATION	<input type="checkbox"/> SIDETRACK TO REPAIR WELL	<input type="checkbox"/> TEMPORARY ABANDON	
	<input type="checkbox"/> TUBING REPAIR	<input type="checkbox"/> VENT OR FLARE	<input type="checkbox"/> WATER DISPOSAL	
	<input type="checkbox"/> WATER SHUTOFF	<input type="checkbox"/> SI TA STATUS EXTENSION	<input type="checkbox"/> APD EXTENSION	
	<input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> OTHER	OTHER: <input type="text"/>	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

On 5/31/2012 Petroglyph Operating ran GR/CBL and found ETOC @ 58', and perf'd: 4096-4107, 4342-52, 4409-38, 4577-79, 4588-90, 4612-18, 4748-52, 5070-72, 5083-85, 5113-20, & 5152-58. We frac'd the following: Zone 1: 5070-5158 w/ 476 Bbls fluid cont. 31,700#'s of sand, Zone 2: 4748-52 w/ 282 Bbls fluid cont. 14,400#'s of sand, Zone 3: 4577-4618 w/ 348 Bbls fluid cont. 20,000#'s of sand, Zone 4: 4409-38 w/ 732 Bbls fluid cont. 70,100#'s of sand, Zone 5: 4342-52 w/ 386 Bbls fluid cont. 18,050#'s of sand, & Zone 6: 4096-4107 w/ 320 Bbls fluid cont. 11,600#'s of sand. Isolation Plugs:

Halliburton 8K Composite. Fluid: Delta 140 15# gelled fluid. Sand: 20/40 mesh premium white. Perf guns were Titan 3 1/8" cont. 22.7 gram charges, 0.42"EHD, 23.54"TTP @ 4 spf @ 120* phased. Plugs drilled out and well cleaned to 5334, swabbed until good oil cut was seen, ran pump and put to pump 6/28/2012.

Accepted by the
Utah Division of
Oil, Gas and Mining
FOR RECORD ONLY
 July 25, 2012

NAME (PLEASE PRINT) Rodrigo Jurado	PHONE NUMBER 435 722-5302	TITLE Regulatory & Compliance Spc
SIGNATURE N/A		DATE 7/25/2012

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

RECEIVED
AUG 15 2012

AMENDED REPORT ☐ FORM 8
(highlight changes)

5. LEASE DESIGNATION AND SERIAL NUMBER:
14-20-H62-3519

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Ute Indian Tribe

7. UNIT or CA AGREEMENT NAME
14-20-H62-4650

8. WELL NAME and NUMBER:
Ute Tribal 30-05

9. API NUMBER:
4301350935

10. FIELD AND POOL, OR WILDCAT
Antelope Creek

11. QTR/QTR, SECTION, TOWNSHIP, RANGE,
MERIDIAN:
SWNW 30 5S 3W

12. COUNTY
Duchesne

13. STATE
UTAH

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

1a. TYPE OF WELL: OIL WELL ☒ GAS WELL ☐ DRY ☐ OTHER ☐

b. TYPE OF WORK: NEW WELL ☒ HORIZ. LATS. ☐ DEEP-EN ☐ RE-ENTRY ☐ DIFF. RESVR. ☐ OTHER ☐

2. NAME OF OPERATOR:
Petroglyph Operating Company, Inc.

3. ADDRESS OF WELL (FOOTAGES):
P.O. Box 607 CITY Roosevelt STATE UT ZIP 84066 PHONE NUMBER: (435) 722-2531

4. LOCATION OF WELL (FOOTAGES):
AT SURFACE: 2045' FNL, 353' FWL
AT TOP PRODUCING INTERVAL REPORTED BELOW: 1998' FNL, 565' FWL
AT TOTAL DEPTH: 2021' FNL, 564' FWL BHL by HSM

14. DATE SPUDDED: 3/29/2012 15. DATE T.D. REACHED: 5/9/2022 16. DATE COMPLETED: 6/28/2012 ABANDONED ☒ READY TO PRODUCE ☐

17. ELEVATIONS (DF, RKB, RT, GL):
6175 RKB

18. TOTAL DEPTH: MD 5,386 TVD 5,378 19. PLUG BACK T.D.: MD 5,334 TVD 5,326 20. IF MULTIPLE COMPLETIONS, HOW MANY? * 21. DEPTH BRIDGE MD PLUG SET: TVD

22. TYPE ELECTRIC AND OTHER MECHANICAL LOGS RUN (Submit copy of each)

ACTR, Borehole Volume, Spectral Density, SDDSN, CBL.

23. WAS WELL CORED? NO ☒ YES ☐ (Submit analysis)
WAS DST RUN? NO ☒ YES ☐ (Submit report)
DIRECTIONAL SURVEY? NO ☐ YES ☒ (Submit copy)

24. CASING AND LINER RECORD (Report all strings set in well)

HOLE SIZE	SIZE/GRADE	WEIGHT (#/ft.)	TOP (MD)	BOTTOM (MD)	STAGE CEMENTER DEPTH	CEMENT TYPE & NO. OF SACKS	SLURRY VOLUME (BBL)	CEMENT TOP **	AMOUNT PULLED
20	14 K-55	42	0	114		G 275	56	0	
12.25	8.625 J-55	24	0	507		G 350	72	0	
7.875	5.5 J-55	15.5	0	5,379		G 725	226	0 CBL	

25. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)	SIZE	DEPTH SET (MD)	PACKER SET (MD)
2.875	5,193							

26. PRODUCING INTERVALS

FORMATION NAME	TOP (MD)	BOTTOM (MD)	TOP (TVD)	BOTTOM (TVD)	INTERVAL (Top/Bot - MD)	SIZE	NO. HOLES	PERFORATION STATUS
(A) Green River	4,096	5,158	4,089	5,150	4,096 5,158	0.42	324	Open <input checked="" type="checkbox"/> Squeezed <input type="checkbox"/>
(B)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(C)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>
(D)								Open <input type="checkbox"/> Squeezed <input type="checkbox"/>

27. PERFORATION RECORD

28. ACID, FRACTURE, TREATMENT, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL	AMOUNT AND TYPE OF MATERIAL
4,096'-5,158'	2,544 Bbls Delta 140 15# gelled fluid containing 165,850#'s 20/40 mesh sand.

29. ENCLOSED ATTACHMENTS:

☒ ELECTRICAL/MECHANICAL LOGS ☐ GEOLOGIC REPORT ☐ DST REPORT ☒ DIRECTIONAL SURVEY
☐ SUNDRY NOTICE FOR PLUGGING AND CEMENT VERIFICATION ☐ CORE ANALYSIS ☒ OTHER: UDOGM Form 7

30. WELL STATUS:

POW

31. INITIAL PRODUCTION

INTERVAL A (As shown in item #26)

DATE FIRST PRODUCED: 6/28/2012	TEST DATE: 7/16/2012	HOURS TESTED: 24	TEST PRODUCTION RATES: →	OIL – BBL: 38	GAS – MCF: 37	WATER – BBL: 100	PROD. METHOD: Rod Pump
CHOKE SIZE: 40/64	TBG. PRESS. 50	CSG. PRESS. 140	API GRAVITY 39.50	BTU – GAS 1	GAS/OIL RATIO 973	24 HR PRODUCTION RATES: →	INTERVAL STATUS: Open

INTERVAL B (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

INTERVAL C (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

INTERVAL D (As shown in item #26)

DATE FIRST PRODUCED:	TEST DATE:	HOURS TESTED:	TEST PRODUCTION RATES: →	OIL – BBL:	GAS – MCF:	WATER – BBL:	PROD. METHOD:
CHOKE SIZE:	TBG. PRESS.	CSG. PRESS.	API GRAVITY	BTU – GAS	GAS/OIL RATIO	24 HR PRODUCTION RATES: →	INTERVAL STATUS:

32. DISPOSITION OF GAS (Sold, Used for Fuel, Vented, Etc.)

Used for Fuel

33. SUMMARY OF POROUS ZONES (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

34. FORMATION (Log) MARKERS:

Formation	Top (MD)	Bottom (MD)	Descriptions, Contents, etc.	Name	Top (Measured Depth)
				Uinta	30
				Green River	1,038
				Trona	2,304
				Mahogany	2,458
				Garden Gulch	3,135
				B Marker	3,534
				X Marker	4,020
				Douglas Creek	4,163
				B Lime	4,540
				Castle Peak	5,092

35. ADDITIONAL REMARKS (Include plugging procedure)

All perf and frac info is condensed. Please see NOI and Subsequent Frac Sundry for a detailed record.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

NAME (PLEASE PRINT) Rodrigo JuradoTITLE Regulatory Compliance Spc.SIGNATURE DATE 8/3/2012

This report must be submitted within 30 days of

- completing or plugging a new well
- drilling horizontal laterals from an existing well bore
- recompleting to a different producing formation

- reentering a previously plugged and abandoned well
- significantly deepening an existing well bore below the previous bottom-hole depth
- drilling hydrocarbon exploratory holes, such as core samples and stratigraphic tests

* ITEM 20: Show the number of completions if production is measured separately from two or more formations.

** ITEM 24: Cement Top – Show how reported top(s) of cement were determined (circulated (CIR), calculated (CAL), cement bond log (CBL), temperature survey (TS)).

Send to: Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, Utah 84114-5801

Phone: 801-538-5340

Fax: 801-359-3940



Job Number: SVGJ-120502
 Company: Petroglyph
 Lease/Well: Ute Tribal 30-05
 Location: Duchesne County, Utah
 Rig Name: Casedhole Solutions
 RKB: 0'
 G.L. or M.S.L.: GL

State/Country: Utah/USA
 Declination: 11.27°
 Grid: East To True North
 File name: F:\SURVEY\2012SU~1\PETROG~1\LORENZ\UTE\30-05.SVY
 Date/Time: 25-Apr-12 / 16:14
 Curve Name: Surface - 342' M.D. (Rate Gyro)

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane .00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

We hereby certify that our survey data from
 Surface MD to 342' MD is, to the best of
 our knowledge a true and accurate account of the
 well bore.
 Scott Elias
 MS Energy Services
 4/25/12
 Date

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
100.00	.78	307.57	100.00	.42	-.54	.42	.68	307.57	.78
200.00	.27	315.67	199.99	1.00	-1.24	1.00	1.59	308.76	.51
300.00	.07	348.19	299.99	1.23	-1.42	1.23	1.88	310.81	.21
Last Survey Depth Recorded									
342.00	.16	50.87	341.99	1.29	-1.38	1.29	1.89	313.04	.34



Job Number: UT121006
 Company: Petroglyph
 Lease/Well: Ute Tribal 30-05
 Location: Duchesne County
 Rig Name: Aztec Rig 673
 RKB: 10.5
 G.L. or M.S.L.: MSL

State/Country: Utah / USA
 Declination: 11.27
 Grid: True
 File name: C:\DOCUME~1\HBUSER\DESKTOP\UT121006.SVY
 Date/Time: 10-May-12 / 00:29
 Curve Name: Ute Tribal 30-05

Payzone Directional

WINSERVE SURVEY CALCULATIONS
 Minimum Curvature Method
 Vertical Section Plane 77.00
 Vertical Section Referenced to Wellhead
 Rectangular Coordinates Referenced to Wellhead

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	Direction Deg	Dogleg Severity Deg/100
.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
556.00	.00	75.47	556.00	.00	.00	.00	.00	.00	.00
647.00	.91	53.89	647.00	.43	.58	.66	.72	53.89	1.00
737.00	1.58	86.94	736.98	.91	2.40	2.54	2.57	69.17	1.06
829.00	2.55	86.42	828.91	1.11	5.71	5.81	5.82	79.01	1.05
920.00	3.16	76.18	919.80	1.83	10.17	10.32	10.33	79.77	.87
1012.00	3.82	73.54	1011.63	3.31	15.57	15.91	15.91	78.00	.74
1105.00	4.44	77.10	1104.39	4.99	22.05	22.60	22.60	77.25	.72
1198.00	5.05	77.36	1197.07	6.69	29.55	30.30	30.30	77.24	.66
1291.00	4.13	80.04	1289.77	8.16	36.84	37.73	37.74	77.51	1.02
1384.00	4.26	77.23	1382.52	9.51	43.51	44.53	44.54	77.67	.26
1477.00	4.09	78.51	1475.27	10.93	50.13	51.30	51.31	77.70	.21
1570.00	4.66	77.54	1568.00	12.41	57.07	58.40	58.40	77.73	.62

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
1663.00	4.53	75.56	1660.70	14.14	64.31	65.84	65.85	77.60	.22
1757.00	4.26	77.67	1754.43	15.81	71.32	73.05	73.05	77.50	.33
1850.00	4.13	80.62	1847.18	17.09	78.00	79.84	79.85	77.64	.27
1943.00	4.04	86.02	1939.94	17.87	84.57	86.42	86.44	78.07	.42
2036.00	3.74	84.79	2032.73	18.37	90.86	92.66	92.70	78.57	.33
2131.00	3.43	80.44	2127.54	19.12	96.75	98.57	98.62	78.82	.43
2224.00	3.25	79.87	2220.38	20.05	102.08	103.98	104.03	78.89	.20
2317.00	3.69	68.14	2313.22	21.63	107.46	109.57	109.61	78.62	.90
2409.00	3.87	67.65	2405.02	23.91	113.08	115.56	115.58	78.06	.20
2502.00	3.96	68.41	2497.80	26.28	118.96	121.83	121.83	77.54	.11
2595.00	4.04	66.25	2590.57	28.78	124.95	128.22	128.22	77.03	.18
2688.00	3.78	66.77	2683.36	31.31	130.77	134.46	134.46	76.53	.28
2781.00	4.44	72.31	2776.12	33.62	137.01	141.06	141.08	76.21	.83
2875.00	4.41	74.08	2869.84	35.71	143.95	148.30	148.32	76.07	.15
2968.00	4.88	81.54	2962.53	37.28	151.30	155.81	155.83	76.16	.82
3061.00	5.19	80.48	3055.17	38.55	159.37	163.95	163.96	76.40	.35
3154.00	4.70	80.04	3147.83	39.91	167.27	171.96	171.96	76.58	.53
3247.00	4.22	81.10	3240.54	41.10	174.40	179.18	179.18	76.74	.52
3340.00	3.91	79.96	3333.31	42.18	180.90	185.75	185.76	76.88	.34
3433.00	3.91	79.87	3426.09	43.29	187.15	192.09	192.09	76.98	.01
3526.00	3.60	80.70	3518.89	44.32	193.15	198.17	198.17	77.08	.34
3619.00	2.99	77.98	3611.74	45.30	198.40	203.51	203.51	77.14	.68
3713.00	2.24	78.51	3705.64	46.17	202.60	207.80	207.80	77.16	.80
3806.00	1.76	84.57	3798.58	46.67	205.80	211.03	211.03	77.22	.56
3899.00	1.58	87.30	3891.54	46.86	208.51	213.71	213.71	77.33	.21
3992.00	1.19	95.38	3984.52	46.83	210.75	215.88	215.89	77.47	.47
4085.00	.92	97.40	4077.50	46.65	212.45	217.50	217.51	77.62	.29
4178.00	.88	132.78	4170.49	46.07	213.72	218.60	218.62	77.84	.59
4271.00	.92	157.17	4263.48	44.89	214.53	219.13	219.18	78.18	.41
4364.00	1.23	164.86	4356.46	43.24	215.08	219.29	219.38	78.63	.37
4457.00	1.23	182.02	4449.44	41.28	215.31	219.07	219.23	79.15	.39
4549.00	1.19	181.38	4541.42	39.34	215.25	218.58	218.81	79.64	.05
4642.00	1.36	201.03	4634.40	37.34	214.83	217.72	218.05	80.14	.50
4735.00	1.19	213.99	4727.38	35.51	213.89	216.40	216.82	80.57	.36

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	N-S FT	E-W FT	Vertical Section FT	C L O S U R E		Dogleg Severity Deg/100
							Distance FT	Direction Deg	
4828.00	.88	188.63	4820.36	34.01	213.25	215.43	215.94	80.94	.59
4921.00	.75	180.28	4913.35	32.69	213.14	215.03	215.63	81.28	.19
5015.00	.62	208.67	5007.34	31.63	212.89	214.55	215.22	81.55	.38
5107.00	1.14	192.59	5099.33	30.30	212.45	213.82	214.60	81.88	.62
5200.00	1.05	193.42	5192.32	28.57	212.05	213.04	213.97	82.33	.10
5293.00	1.63	189.64	5285.29	26.44	211.63	212.15	213.28	82.88	.63
5323.00	1.76	188.06	5315.28	25.56	211.50	211.82	213.03	83.11	.46
Projection to TD									
5386.00	1.76	188.06	5378.25	23.64	211.22	211.13	212.54	83.61	.00

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 7

REPORT OF WATER ENCOUNTERED DURING DRILLING

RECEIVED

AUG 15 2012

Well name and number: Ute Tribal 30-05

API number: 4301350935

Well Location: QQ SWNW Section 30 Township 5S Range 3W County Duchesne

DIV. OF OIL, GAS & MINING

Well operator: Petroglyph Operating Company, Inc.

Address: P.O. Box 607

city Roosevelt state UT zip 84066

Phone: (435) 722-2531

Drilling contractor: Craig's Roustabout Service

Address: 5053 South 4625 East

city Vernal state UT zip 84066

Phone: (435) 781-1366

Water encountered (attach additional pages as needed):

DEPTH		VOLUME (FLOW RATE OR HEAD)	QUALITY (FRESH OR SALTY)
FROM	TO		
0	190	<i>L1 GPM</i>	Salty

Formation tops:
(Top to Bottom)

1	2	3
4	5	6
7	8	9
10	11	12

If an analysis has been made of the water encountered, please attach a copy of the report to this form.

I hereby certify that this report is true and complete to the best of my knowledge.

NAME (PLEASE PRINT) Rodrigo Jurado

TITLE Regulatory Compliance Spc.

SIGNATURE 

DATE 8/3/2012

Units of Measurement: Standard

Water Analysis Report

Production Company: PETROGLYPH
Well Name: Ute Tribal 30-05
Sample Point: Rat Hole Rig
Sample Date: 4/5/2012
Sample ID: WA-215387

Sales Rep: James Patry
Lab Tech: John Keel

Scaling potential predicted using ScaleSoftPitzer from
Brine Chemistry Consortium (Rice University)

Sample Specifics		Analysis @ Properties in Sample Specifics			
Test Date:	6/8/2012	Cations	mg/L	Anions	mg/L
System Temperature 1 (°F):	300.00	Sodium (Na):	945.41	Chloride (Cl):	500.00
System Pressure 1 (psig):	1300.0000	Potassium (K):	5.20	Sulfate (SO ₄):	159.00
System Temperature 2 (°F):	65.00	Magnesium (Mg):	24.40	Bicarbonate (HCO ₃):	1586.00
System Pressure 2 (psig):	14.7000	Calcium (Ca):	2.60	Carbonate (CO ₃):	
Calculated Density (g/ml):	0.999	Strontium (Sr):		Acetic Acid (CH ₃ COO)	
pH:	9.00	Barium (Ba):	0.00	Propionic Acid (C ₂ H ₅ COO)	
Calculated TDS (mg/L):	3223.11	Iron (Fe):	0.30	Butanoic Acid (C ₃ H ₇ COO)	
CO ₂ in Gas (%):		Zinc (Zn):	0.00	Isobutyric Acid ((CH ₃) ₂ CHCOO)	
Dissolved CO ₂ (mg/L):	0.00	Lead (Pb):	0.20	Fluoride (F):	
H ₂ S in Gas (%):	0.00	Ammonia NH ₃ :		Bromine (Br):	
H ₂ S in Water (mg/L):	0.00	Manganese (Mn):	0.00	Silica (SiO ₂):	

Notes:

(PTB = Pounds per Thousand Barrels)

		Calcium Carbonate		Barium Sulfate		Iron Sulfide		Iron Carbonate		Gypsum CaSO ₄ ·2H ₂ O		Celestite SrSO ₄		Halite NaCl		Zinc Sulfide	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
65.00	14.00	0.85	1.95	0.00	0.00	0.00	0.00	1.68	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91.00	157.00	0.90	1.98	0.00	0.00	0.00	0.00	1.83	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	300.00	0.98	2.03	0.00	0.00	0.00	0.00	1.99	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143.00	443.00	1.07	2.08	0.00	0.00	0.00	0.00	2.14	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169.00	585.00	1.17	2.12	0.00	0.00	0.00	0.00	2.29	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195.00	728.00	1.29	2.16	0.00	0.00	0.00	0.00	2.42	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
221.00	871.00	1.41	2.18	0.00	0.00	0.00	0.00	2.55	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.00	1014.00	1.53	2.20	0.00	0.00	0.00	0.00	2.65	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
273.00	1157.00	1.64	2.22	0.00	0.00	0.00	0.00	2.73	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	1300.00	1.75	2.23	0.00	0.00	0.00	0.00	2.78	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

		Hemihydrate CaSO ₄ ·0.5H ₂ O		Anhydrate CaSO ₄		Calcium Fluoride		Zinc Carbonate		Lead Sulfide		Mg Silicate		Ca Mg Silicate		Fe Silicate	
Temp (°F)	PSI	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB	SI	PTB
65.00	14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
91.00	157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
117.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
143.00	443.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
169.00	585.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
195.00	728.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
221.00	871.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
247.00	1014.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
273.00	1157.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	1300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

These scales have positive scaling potential under initial temperature and pressure: Calcium Carbonate Iron Carbonate

These scales have positive scaling potential under final temperature and pressure: Calcium Carbonate Iron Carbonate

